Working fictions of money: the making of currency (dis)trust in Argentina (1880-2020)

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To my father Jaime and my sister Florencia, without whose unconditional love and constant support this thesis would not exist. To the living memory of my mother Adriana.

To all those who have themselves gone through a monetary crisis, in the hope that this work contributes to alleviating their misfortune.

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The test of our progress is not whether we add more to the abundance of those who have much; it is whether we provide enough for those who have too little. – FRANKLIN D. ROOSEVELT, Inaugural Address, January 20, 1937.

1. Introduction

> *Forget about psychologists, advertising managers, and football coaches. Here the ones who succeed are economists. In Argentina it is impossible to go out on the street without familiarizing yourself with thirty or forty macro statistics beforehand. In the morning, any good radio station has its experts ready to [explain the latest news and] provide the public with various brilliant metaphors to describe the economic situation. [...] At nine o'clock at night, on any television channel, you will see two or three experts ready to throw figures in your face and display their macro data like an assistant at the shop. Each of the 40 million Argentines knows that the official dollar was worth $8.09 five minutes ago. Or that the 'blue' dollar - the dollar sold in the informal or black market - was worth $12.55 on Tuesday. Or that the Central Bank reserves have dropped to 28 billion dollars. […]*
>
> *[Unfortunately, what would be useful is that] a country that in the last four decades has suffered several traumatic devaluations, exchange rate crises, and two hyperinflations had learned more than just a few figures and concepts. It should have learned to avoid these events. Instead, ordinary citizens had to learn to dribble the prices and survive. And some of the best economists learned to set up consulting firms and make money from companies seeking advice on how to navigate the storm.*[1][2]

In April 2018, newspapers from around the world reported the sharp devaluation of the Argentine peso. After the Federal Reserve announced the United States would raise interest rates, the peso's value plummeted. According to the *Financial Times*, the Argentine currency even surpassed Turkey's lira to become the worst-performer in foreign exchange markets in 2018.[3] Once again, Argentina had amazed the world due to its monetary scandals. The questions were always the same: How is it possible for a

[1] Fragment of the article: "Argentina, an economist's paradise", published in the newspaper *La Capital* on February 8, 2014. Available at: https://www.lacapital.com.ar/edicion-impresa/argentina-paraiso-economistas-n637274.html Last access: 31.07.2020.

[2] In this dissertation, quotes from the bibliography (academic papers and books) are indicated with quotation marks. Quotations from primary sources (newspaper articles, central bank's documents, speeches of the monetary authorities, etc.) are indicated with quotations marks and italics. Also, italics (without any other mark) are used to highlight that a theoretical concept is being used and (occasionally) to emphasize a phrase. Fragments at the beginning of each chapter are also in italics. All quotes originally in Spanish have been translated into English by the author.

[3] See the article: "Argentine peso overtakes lira to be worst-performing EM currency", published in *Financial Times* on August 30, 2018, by Peter Wells. Available at: https://www.ft.com/content/ca6b98c4-ac7b-11e8-89a1-e5de165fa619#. Last access: 30.07.2020.

country to suffer recurrent monetary crises for seventy years and not learn from its mistakes? How can a nation that has experienced all kinds of monetary disorders cannot master monetary policy? Are economic problems more severe than is often believed? Are local policymakers particularly nonsensical? Is corruption the problem? Is it that subordinate integration prevents Argentina's economy to take off? Why can Argentina not break the vicious circle of monetary instability and distrust in money? Most importantly, are there any lessons to be learned from Argentina's misfortunes?

In this dissertation, I use Argentina as a case study to understand the social, political, and institutional dynamics that foster (dis)trust in money and reproduce monetary instability. I study how trust in money is socially built and what processes cause trust in money to morph into distrust, thus endangering money's reproduction as a social institution. In particular, I analyze two parallel processes. On the one hand, the long historical process which led trust in the Argentine peso to morph into distrust. I show how since 1946, monetary instability and distrust in money in Argentina have been reinforcing each other, leading to a vicious circle. Secondly, I study the dollarization of savings that accompanied the loss of trust in the national currency and highlight how the dollar's growing popularity increased monetary instability even further. I stress how both national and international monetary dynamics have fostered local monetary instability.

The Argentine case is particularly enlightening to analyze the relationship between monetary instability and distrust in money. The most obvious reason for this is that monetary instability has been one of the regularities of the economic field in the country for more than seventy years. For much of the latter half of the 20th century, Argentina experienced recurrent bouts of high inflation and repeated balance of payments crisis that ended in sharp devaluations. Argentina also suffered two dramatic hyperinflation episodes. Within Latin America, the Argentine economy is the one that has experienced monetary instability for the most extended period. Thus, Argentina is the perfect setting to understand the effects of monetary instability on trust in money.

Taking Argentina as a case is also especially interesting for this research because of the high dollarization of savings. On more than one occasion, Argentina has been defined as

"the world champion of dollarization".[4] The statement does not seem exaggerated. In 2006 a report from the Federal Reserve located Argentina as the country with the highest percentage of dollars per capita, after the United States[5]. In 2016 specialists estimated that Argentines hoarded around 400 billion dollars outside the local financial system, which is equivalent to the wealth produced by the national economy during a year[6]. High dollarization in Argentina is a clear indication of the lack of trust in the national currency. In fact, during the past seventy years, Argentines dramatically changed the strategies they use for saving. Until 1946 Argentines saved in pesos. However, since that moment on, important transformations in the national economy threatened trust in the peso. As a consequence, Argentines started to take their resources outside the financial system and invest them in other areas of the economy. By that time, assets flew to the markets for durable goods and real state. Moreover, since 1957 (the year that Argentina signed the Bretton Woods agreements), Argentines started to hoard cash dollars. Soon, the practice became an incredibly popular strategy to preserve savings and wealth. The dramatic instability that the country experienced since 1975, increased dollarization even further. Today, real estate and (cash) dollars are the Argentine's main options to preserve savings and wealth (Corso 2015).

Far from being occasional events, episodes of crisis and monetary instability are common phenomena in capitalism.[7] As Hyman Minsky (1982) rightly argued, capitalist economies

[4] Quotation from the article "Dólar y argentinos, más allá de pasión y calculo", published in the newspaper *El cronista comercial*, on April 5, 2018. Available at: https://www.cronista.com/columnistas/Dolar-y-argentinos-mas-alla-de-pasion-y-calculo-20180405-0018.html. Last access: 31.07.2020

[5] See the report: "The Use and Counterfeiting of United States Currency Abroad, Part 3." The Federal Reserve Board, United States, Federal Reserve. September 2006. Available at: https://www.federalreserve.gov/boarddocs/rptcongress/counterfeit/default.htm#toc1.3. Last access 31.07.2020

[6] See the article: "Encuentran al menos US$ 400 millones sin declarar en el blanqueo", published in *Perfil* on April 15, 2019. Available at: https://noticias.perfil.com/noticias/general/2019-04-15-encuentran-al-menos-us-400-millones-sin-declarar-en-el-blanqueo.phtml. Last access 31.07.2020.

[7] In this study, I refer to monetary instability as a general phenomenon that includes not only long periods in which there is a constant fluctuation on the value of money (i.e., sustained high inflation), but also moments of crises (events that happen in a relatively short period and in which money's value changes sharply, such as currency devaluations and hyperinflationary peaks). Thus, I group three types of currency disruptions (high inflation, hyperinflation, and currency devaluations) into one category of 'monetary instability'. There are two reasons why I do not draw a sharp distinction between these three types of disruptions. The first one is that, on many occasions in Argentina, these disruptions have emerged simultaneously, and it is hard to distinguish which one of them is the driving force behind instability and which would be the consequence. Secondly, it is not very helpful to distinguish sharply between these events in this study. This study aims to analyze how monetary instability has had an impact on trust in money. Thus, it focuses mainly on social actors' experiences with instability, and in how do actors perceive changes in money's value and try to develop strategies to cope with the loss of purchasing power. In this regard, I consider that a single category of monetary instability serves better this dissertation's purposes, mostly because social actor's responses to instability depend on the changes on money's value. That is to

are prone to suffer financial and monetary upheavals by their very design. Since the breakdown of the Bretton Woods international monetary system, the tendency towards greater monetary and financial instability has increased. Because of monetary crises' unquestionable importance, many academic works have studied them, thus contributing to their understanding. However, there are still significant gaps regarding the causes, dynamics, and modes of reproduction of monetary instability. In this dissertation, I focus especially on studying how and why monetary instability episodes cause trust in money to morph into distrust. I approach the study of this topic from a theoretical perspective that integrates economic sociology and political economy contributions to the study of contemporary money. I also build on studies of monetary instability within economics, sociology, and political economy. I follow studies of currency crises within sociology and heterodox economics (Aglietta 2018; Théret 2007a; 2007b; 2015) in their claim that monetary crises are strategic windows for studying trust in money. Like these studies, I start from the recognition that studying monetary disruptions is particularly fruitful for understanding trust in money and how this trust produces and reproduces itself. It is because episodes of monetary upheaval (i.e., hyperinflationary peaks, sustained long-term inflation, and exchange rate crises) lift the veil that conceals money during normal times, that they allow scientists to observe contemporary money's inner institutional dynamics and workings.

The analysis I present in this dissertation relies on two main findings of social studies of currency crises. First, that to understand trust in money, scientist need to study monetary crises. Second, that the reason why monetary crises undermine trust in money is because they reveal money's inner workings. However, I contribute to ongoing debates on money and trust by pointing out that social studies of monetary crises have failed to specify what is exactly that monetary crises reveal about money that endangers trust. I argue that these studies have failed to explain what is it about money's inner workings that crises reveal and that spooks people. In this study, I address this question directly and specify what is exactly that crises reveal about money that spooks people and endanger trust in money. I show what we learn about money through crises and how these revelations destroy our trust in money as an institution capable of storing value. In this regard, I study Argentina's frustrating monetary history as a strategic window to study where is trust in money

say, these responses are independent of which one of these three events has been the actual source of instability of the national currency.

grounded, how trust in a currency can morph into distrust, and how such (dis)trust produces and reproduces itself within contemporary capitalist economies. I also study the role of contemporary monetary hierarchies in the reproduction of trust (or distrust) in contemporary (fiat) currencies.

The central claim I put forward in this dissertation, which intends to contribute to social studies of currency crises and global debates on money and trust, is that in contemporary capitalist economies, trust in money relies on a false image of money and of the reasons why money can store value. I argue that in contemporary capitalist economies, trust in money is grounded in *working fictions of money*, which convey a false image of what money is and how it works. Popular *fictions* of money depict money as a commodity that possesses an intrinsic value that lasts over time. However, this is a false image of contemporary fiat money, which is not supported by any material asset. In the dissertation, I show that monetary crises cast a spotlight on the institutional reality and the inner workings of contemporary money. Because recurrent monetary crises expose the monetary institution's regularities, they reveal the fictionality of monetary beliefs. Crises show there is nothing behind fiat currencies, no substance that supports their value. This shattering revelation causes trust in money to morph into distrust. Through this analysis, the thesis exposes the paradox of modern money: that once people are aware of money's true nature, they do no longer trust it. Doing so, the analysis emphasizes the importance of a successful politics of expectations to ensure monetary governability.

2. What is money, and why do we trust it?

Money is an enigma and has always been. Especially after the abandonment of the gold standard in 1971, money's widespread use represents a mystery. Why would anyone exchange real goods and services for a piece of paper, a token coin, or an electronic blip? Throughout history, the answer to this question has been summed up in a simple idea: people *trust* in money's present and future value. The main reason people are willing to accept money in exchange for goods is that they *trust* in two things. First, they trust that money will maintain its value over time, and, second, they trust that other people will continue to accept money as a form of payment in the future. This double trust is the foundation of money's essential mystery: that its value comes from each of us believing that everybody else will continue to believe in its value.

As I will show in the following pages, the study of capitalist credit money has traditionally been associated with the study of trust. Most classical authors within economics, sociology, and political science – i.e., Knapp, Simmel, Weber, Keynes, Giddens, Luhmann, and others - have engaged more or less directly with this discussion and provided a variety of not always compatible definitions. However, once we accept that, indeed, to function correctly, capitalist credit money depends on the existence of trust, the literature does not offer much guidance on *what trust in money is*, *where is it grounded* and *how it is socially produced and reproduced*. Where does trust in money come from? What are the mechanisms by which monetary trust is produced and reproduced within society? Who produces this trust? Can trust in money be lost? If so, is it possible to restore it?

In this chapter, I will engage with these questions directly and try to provide some definitions. In particular, I will review the literature on money and trust and highlight the most important contributions to this academic debate. Through this analysis, I will show that trust in money is systemic and has two fundamental dimensions. First, a passive dimension that relates to the reproduction of trust in money through monetary routines and habits. Second, an active sociopolitical dimension, which depends mostly on the monetary authorities' actions to foster trust. At the same time, in agreement with social studies of money and monetary crises (Aglietta 2018; Orléan 2014; Théret 2007a; 2007b; 2015), I will argue that crises are privileged moments for the study of trust in money,

precisely because during those moments trust in money breaks apart and its different dimensions unfold. Thus, during crises, social scientists can study trust's different dimensions in detail. Moreover, in this chapter, I will contribute to debates on money and trust in specifying precisely what crises reveal about money that spooks people. I will argue that crises reveal that socially shared conceptions on money as an asset capable of storing value are grounded in (erroneous) collective monetary beliefs. My argument is that crises show that the *promise of value* that supports trust in a currency is rooted in a set of shared misconceptions on what money is, how it works, and why is it capable of storing value. However, to the extent that the false image of money depicted by these mistaken beliefs is crucial for the correct functioning of money as a social institution within capitalist market economies, these beliefs can be regarded as *working fictions of money*. It is the breakoff of these fictions that causes widespread trust in money to morphed into distrust.

What is trust?

There is perhaps no concept so extensively discussed within modernity as the one of trust. As anthropologist Matthew Carey (2017) puts it, from the broad plains of popular psychology to all corners of academia, trust is everywhere. And everywhere is lauded as both necessary and good. It is necessary, in the sense that is seen as a precondition for virtually all aspects of collective human existence. Whatever it is we value in our society, trust seems to be *that* what enables it to flourish. "For sociologists like Simmel, trust is the glue of society. [Indeed] we could not live alongside others without the minimal trust that allows us to periodically turn our backs to them" (Carey 2017, 1). However, this collective positive view on the benefits derived from trust should not be confused with any consensus on what trust actually *is* or how we can foster it. Though trust occupied a central position in the classical works of renown thinkers such as Thomas Hobbes, John Locke, Georg Simmel, Max Weber, Niklas Luhmann, and Anthony Giddens, it was rarely interrogated directly, functioning instead as a sort of black box at the heart of social and political theory.

It is not my intention here to delve deep into the general discussion about the concept of trust within social theory. However, I want to point out some aspects of this discussion, which will prove useful to better understand the specific debates about trust in money. A

first important point to reflect on is the debate on what trust is. From a broad perspective, trust can be defined as "a state of favorable expectation regarding other people's actions and intentions" (Möllering 2001, 404). Indeed, as Katherine Hawley (2012) points out, one should think of trust in terms of commitment: when a person trusts on someone, she relies upon that other person to meet her commitments. A similar principle applies to trust in institutions. The commitment view also easily explains why we do not place our trust in objects, such as chairs, cars, and curtains: the curtains have not made any commitment to keep out the cold air, after all. And that is why this is not a matter of trust. Indeed, I rely on my alarm clock to wake me up every morning, and on my key to open the door. But I do not think of this in terms of commitment, obligations, or promises. So I do not think of this as trust, but merely as reliance. A second important element to keep in mind when defining trust is that this concept is, by definition, associated with that of risk. In fact, I do not speak about trust if I refer to perfectly predictable and accurate facts, such as 'the sun will come out tomorrow'. On the contrary, trust helps us deal with other human beings' agency and indeterminacy. And that is why, in contemporary western societies, where uncertainty and risk are all over, trust emerges as a fundamental social technology (Misztal 1998). In this regard, trust can be seen as a way of viewing the world that relies on familiarity as a basis for simplification. Thus, trust emerges as the result of a process of simplification by which social actors reduce the variety of possible futures; they limit them so that they can act and make decisions as if the future were unique and accurate. According to Simmel, for example, trust is "a hypothesis regarding future behavior, a hypothesis certain enough to serve as a basis for practical conduct" (Simmel 1950, 318). Given that, at any given moment, social actors are confronted with infinitely ramifying possible futures, and that this uncertainty is unmanageable for a human mind, trust simplifies this complexity by functionally limiting these possible futures. As Poggi suggests, for sociologists like Luhmann, trust "typically do not eliminate complexity, but rather reduce it: that is, make it livable with while in some sense preserving it" (Poggi 1982, x). In this regard, "to show trust is to anticipate the future; it is to behave as though the future were certain" (Carey 2017, 6). A third important feature to keep in mind is that relationships of trust build over time and can be of different intensity: we trust different people, to different degrees, to do different things. We also should distinguish trust in people's skills from trust in their intentions, and keep in mind that both types need to be present in a relationship to enable complete trust (Hawley 2012).

But once we move beyond these three aspects of trust, there is considerably less agreement within the literature regarding what trust actually is, where it is grounded, and how it is socially produced and reproduced. A crucial first distinction concerns the opposition between trust as a strategy and trust as a psychological state or attitude. Strategic approaches predominate in mainstream economics and conceive social actors as rational individuals who are capable to deliberately and consciously decide whether to put or not their trust into someone or something (i.e., in a social institution). In this view, trust is an individual, deliberate, conscious and rational decision that is within a person's own control: she can consider the evidence, weigh it up, and then decide whom to trust about what. In contrast, sociological and psychological literature tends to stress the attitudinal quality of trust. Whether located at the individual or the systemic level, this literature emphasizes that trust is not merely a matter of choice, but it is also a way of viewing the world (Carey 2017). Here, the concept of trust is close to that of faith or belief in the sense that, even when a person can try to base her own beliefs on the evidence, this is not always a process of considering the evidence, deciding what to believe, and then believing it. Unlike other activities, believing does not seem to be within our direct control, something we can switch on and off at will, whenever it is convenient. And the same can be said of trust. Very often, we simply find ourselves trusting one person and distrusting another, without having made a conscious choice in the matter (Hawley 2012).

One of the first authors to note the relationship between trust and faith (or belief) was Georg Simmel, whose thoughts on the matter can be found in three short passages - one in *Philosophie des Geldes* and two in *Soziologie*. As Möllering clearly states (2001, 411) in Simmel's view, "trust combines good reasons with faith". Indeed, for Simmel, trust's point of departure is our daily life experience, which is the real basis that our trust relates to. So, in his view, trust is, to a great extent, grounded in rational predictions about other people's future behavior. However, equally important is that, for Simmel, trust also involves a 'leap of faith', a mysterious further element, a belief that is required to explain trust and grasp its unique nature (Möllering 2001). This 'leap of faith' is far from rational. So, ultimately, for Simmel, trust is both more and less than knowledge (Simmel 2011). Later on, Niklas Luhmann also elaborated on the nature of trust as a mixture of rational and irrational elements. In his influential book *Trust and Power*, Luhmann departed from Simmel's notion of trust as a 'blending of knowledge and ignorance', and stated that "trust always extrapolates from the available evidence" that people gather through their life

experience (*Erleben*) (Luhmann 1982, 26). That is why trust is only possible within a familiar environment. However, for Luhmann, the most critical element is that, as I have already pointed out, trust reduces social complexity through generalization within social systems. So, as Sally Frankel notices, for both Simmel and Luhmann:

> "Trust is a functional alternative to rational prediction for the reduction of complexity. Indeed, trust succeeds where rational prediction alone would fail, because to trust is to live as if certain rationally possible futures will not occur. Thus, trust reduces complexity far more quickly, economically, and thoroughly than does prediction. Trust allows social interactions to proceed on a simple and confident basis, where, in the absence of trust, the monstrous complexity posed by contingent futures would again return to paralyze action" (Frankel 1977, 38).

Contemporary debates on trust have also addressed the discussion on the extent to which trust originates in a rational process. Here as well, the debate highlights the emotional process that accompanies the development of interpersonal trust. Lewis and Weigert (1985, 972) consider that "trust is a mix of feeling and rational thinking". From this perspective, trust has an affective component, an emotional bond among all those who participate in the relationship (Misztal 1998). And, indeed, it is a well-known fact that the loss of trust that accompanies situations of betrayal or deception involves some of the strongest emotional experiences we can have in our social life, creating great emotional turmoil for all parties implied (Möllering 2005).

Another important discussion regarding the concept of trust is the one concerning where trust is grounded, whether at the individual or the systemic level. There is no doubt trust is, to a great extent, an interpersonal relationship. In this regard, and as I have previously stated, rich interpersonal trust is bound up with commitment. Trusting people involves relying upon them to meet their promises, to follow through on their undertakings. In the same way, trustworthiness involves matching our actions to our commitments, not least by exercising caution in incurring new commitments. Moreover, trust has moral overtones: it is a good thing to be trustworthy, to keep our promises, and we are entitled to resent people who prove untrustworthy, who do not live up to their commitments (Hawley 2012). But trust can also be present at the systemic level. In fact, for many

decades, if not centuries, sociologists and political scientists have widely accepted that trust can be directed towards institutions, public figures, and entire social groups (Möllering 2005). Social sciences have devoted an enormous amount of energy to try to explain the emergence of systemic trust. Indeed, this problem is deeply entangled with the questions of what holds societies together and how social order is maintained (Misztal 1998). For thinkers like Anthony Giddens, the shift of trust in persons to trust in abstract systems is a characteristic of modernity, which is distinguished by time-space distantiations (Giddens 1991; 1994). But again, the problem is that, once we accept that trust can be present at both the personal and the systemic level, the question remains of whether these types of trust are one and the same thing. In other words, the enduring debate is whether there is a difference between trusting the political system and trusting politicians, or between trusting the church and trusting clergymen? Can institutions themselves display trustworthiness or only the individuals who populate those institutions? And here too, there is no widespread consensus. For some scholars, trust in the system is more than the sum of its parts. For others, the emergence of trust on the macro level always requires that individuals in the micro-level carry on actions that foster trust.

For scholars such as Katherine Hawley (2012), trust or confidence[8] in a social institution is an emergent property that is not (and cannot be) based on our independent assessments of the expertise and good intentions of those individuals who are part of such institution. It is not our confidence in the honesty of specific professionals (i.e., lawyers) what enhance our confidence in the institution they are part of (i.e., the legal system), but actually, the reverse is true. It is our trust in the institutional structures, objectives, and drivers that fosters or undermines our trust in both the institution and the professionals that are part of it. We trust in both the honesty and the competence of specific

[8] While some authors use the terms *trust* and *confidence* interchangeably, others consider there are slight differences between the two. According to Beckert (2013), the difference between the two concepts is that while the concept of *trust* demarcates a situation in which the other party may take the deliberate decision to damage me for his own benefit; *confidence* refers to a situation in which I engage in incalculable risks that emerge from the openness of the future, which is unforeseeable for both parties. Also, in many contexts, the use of the term confidence over trust expresses more certainty in a positive outcome. In this dissertation, I will use both terms interchangeably. However, it must be noticed that, among the two, I prefer the term trust (mainly when referring to trust in money) and not the term confidence for two reasons. The first reason is simply that debates on money usually refer to the question of trust in money and not so much to confidence in money. More importantly, because I consider that the concept of trust fits better for this dissertation's case study, in which actors' trust in money is often damaged and leads to distrust. Still, this process is not necessarily the result of a deliberate decision on the part of the monetary authorities.

professionals because of the system of credentials, qualifications, and monitoring in which they are embedded, and not the other way around. From this point of view, it all comes down to the question: can institutions or organizations make commitments, promises, undertakings? And the answer is yes, in many cases they can and they do so: companies enter into legal contracts which are not precisely personal agreements between the individuals who happen to be in charge at the time of signing. And nations sign treaties with other nations, and these agreements outlast the individual leaders who have negotiated and signed them (Hawley 2012). More widely, many organizations have charters, statements of purpose, or constitutions that set out goals and guidelines. Let us take, for example, central banks. Most central banks have legal mandates that set out their public purposes, organizational structures, and powers. These purposes often include ensuring the stability of the currency, maintaining full employment, and safeguarding economic welfare. So, as long as it is possible to ask ourselves to what extent these institutions perform the function they are intended to perform or fulfill their primary purposes, it would seem appropriate to think of them in terms of trust and distrust. The better they are doing on these counts, the more trustworthy these institutions are.

But for other scholars, this is not how systemic trust works. There is widespread agreement that institutional-based trust consists of a set of shared expectations that are relatively independent of time and space and that are, to a great extent, depersonalized. But the question remains of how is this depersonalized trust produced and reproduced. For many sociologists (i.e., Beckert, Garfinkel, Giddens, Luhmann, Wenzel), depersonalized trust cannot result from institutionalized practices and devices, which, ultimately, do not exist as such. In fact, institutionalized practices to foster trust are always the result of actions performed by specific individuals who act as authorized representatives of the institution in question. Thus, trust is always the result of the interacting agents' performative acts and their definitions of the situation. Put differently, for depersonalized institutional trust to emerge, specific individuals (who act as representatives of an institution) need to signal and create trustworthiness through their performances. In this regard, it is not surprising that, in trying to find answers to how trust in abstract systems is produced, these scholars have referred to the concept of *dramaturgic action* introduced in the 1950s by Erving Goffman. As Beckert (2005, 19) points out, "Goffman developed this term in analogy to the theater where the actor on the stage has to give a credible expression to the character he embodies to the audience".

From this standpoint, enhancing trust in institutions requires dramaturgic action: the personal communication of trustworthiness at access points where the nexus between the institution and the general public occurs. So, this means that, for trust in abstract systems to be produced and maintained, it must be possible for social actors to meet representatives of the abstract system in person. The latter must show their personal commitment, thus contributing to creating a 'fiction of trust' (Beckert 2005). The main idea here is that both actors involved in a trust relationship create a social fiction, in which the trust-taker seeks to create the impression of trustworthiness on the part of the trust-giver. Moreover, besides producing the impression of trustworthiness, the trust-taker's self-presentation acts (which are an indispensable component for creating the fiction of trust), also have to offer a common definition of the situation and express a confident control of it. Also, there has to be a clear separation between performances on stage and the implementation of activity backstage. This separation prevents negative repercussions on trust, which could result from the revelation of insufficient professional mastery and human error (Beckert 2002).

Finally, a third important debate regarding how trust is socially produced and reproduced highlights the difference between active and passive trust. Sociologists from several academic traditions (i.e., symbolic interactionism, social constructivism, and reflexive sociology,[9] among others), consider trust as a passive emergent of socialization (Misztal 1998). From this standpoint, trust has an interactive and processual character. Trust is interactive because it is created through our daily contact with other human beings, through language, the interpretation of intentions, and the reading of faces, postures, and gestures. As Frederiksen (2014) rightly points out, trust is actually a verb and not so much a noun; it is a relational phenomenon that involves cognitive, emotional, and behavioral elements. Moreover, trust is processual in the sense that it develops over time as a consequence of our experiences and routines and the social structures in which we are immersed. Remarkably, as I will show in the following section, this passive view of trust has been the dominant approach within the sociology of money. This tradition has tended to interpret trust in money as a disposition, mostly unconscious, that is produced by our constant exposure to the social structures in which we are socially embedded. Here, trust

[9] While Pierre Bourdieu's reflexive sociology is often linked to the study of social reproduction and class distinction, this tradition is not so often linked to the study of trust. One notable exception is the seminal work by Barbara Misztal (1998) on trust in modern societies. In her book, Misztal shows the link between the concept of trust and those of habitus and field. On this topic, see Frederiksen (2014).

is a mechanism that allows us to make sense of the world; it is a source of ontological security. Essentially, trust is habitus: the continuation of the past into the present, which secures the social order's maintenance. Likewise, from this perspective, systemic trust is interpreted as grounded in the stability of the social system and the institutions that are part of it. In theoretical terms, this means that we trust because we are socialized to trust (Misztal 1998). But the problem is that, even if there is much truth in this argument, this conception of trust is also problematic because it excludes the self-conscious and rational component of trust. And as I have previously stated, there are different reasons we trust in others. The list includes emotions, familiarity, socialization, and experience, but also some degree of knowledge and rational assessment.

In contrast to this passive interpretation of trust, some social scientists have tried to account for the rational and conscious component of trust in modern societies drawing upon the concept of *active trust*. As Beckert (2002, 262) points out, it was Anthony Giddens who introduced the term to express the notion that in the somewhat unstable contexts of late modernity, trust needs to be continuously worked upon, constantly renewed in communications processes. In *The Consequences of Modernity* (1991), Giddens emphasized that in modern societies, social actors can no longer rely on the structuring influence of kinship, tradition, custom, and religious cosmologies. Because there is no direct equivalent for those traditional institutions in modern societies, they require a different kind of trust, one that has to be won and actively sustained. Thus, from Giddens' viewpoint, contemporary societies call for a distinctive kind of trust; specifically, one that rests on a vague and partial understanding of how the social world works and requires much more deliberate leaps of faith. Thus, while economic relations in premodern societies required a minimal amount of trust, trust must be actively fostered in contemporary environments. Modern societies need to produce trust deliberately and reproduce it and renew it through discursive and dialogic processes (Giddens 1994). As we shall see in the following, within studies of money, this active view of trust is linked to the concept of credibility, which has often been highlighted by political economists who study central banks. These studies show that within modern capitalist societies, trust in money is, to a large extent, dependent on the active creation of trust on behalf of the monetary authorities.

In the last pages, I have engaged with debates on trust within the social sciences and underlined some specific dimensions of scientific debates on this concept. So far, I showed that trust is mostly conceived as ubiquitous and good, for both the individuals and the community that enjoy it. Moreover, I showed that trust can be defined differently. For economists, trust is a rational decision. For most other social scientists, it is an attitude emerging from socialization. Furthermore, trust can be located at both the individual or the collective level and can be passively or actively reproduced. So far about trust, but what then about its flip side?

What is distrust?

About a hundred years ago, Georg Simmel (1950, 313) pointed out that "modern life is based to a much larger extent than is usually realized upon the faith in the honesty of the other". He also stated that, in the contemporary world, the lie becomes particularly devastating as "something which questions the very foundations of our life." As I have shown in the previous section, just like for Simmel, for most contemporary sociologists, trust is a positive feature, a universal virtue that benefits both the individuals and the group that possesses it. From this standpoint, trust is the grease that keeps the wheels of societies rolling over, and, as such, it must be maximized. Not surprisingly, this positive interpretation of trust came along with an equally negative conceptualization of distrust as an acid that would corrode human bonds, thus destroying trust's positive effects. More often than not, this viewpoint meant that scholars tended to interpret distrust only as the flipside of trust. But can we say that distrust is the other face of trust? And what about concepts such as 'mistrust' and 'lack of trust'? Are all these notions one and the same thing? I will argue that, indeed, they are not. If these concepts have remained the object of much confusion and scholarly disagreement, this is due to a lack of systematic research on the relationship between trust and distrust. The widespread assumption that theories of trust entail within them a theory of distrust has significantly contributed to this confusion. Not surprisingly, the absence of theorization on these concepts' specific nature and the lack of clear guidelines on how to treat them led to a lack of coherence and understanding of the nature of distrust, mistrust, and lack of trust (Bertsou 2019).

In the following, I intend to provide some solutions to this academic confusion. By examining these different concepts in their own right and signaling their differences more

clearly, I intend to provide some guidelines that will allow me to make a conscious and informed choice on which of them fits best the aims of this specific research. First of all, it is essential to provide some definitions on each one of these terms. As I have already pointed out in the previous section, trust in someone or something can be defined as a state of favorable expectation regarding other people's actions and intentions (Möllering 2001). In turn, to distrust is to have negative expectations regarding other people's actions, intentions, motives, capacities, and expertise. These negative expectations lead to anticipate harmful outcomes (Bertsou 2019). As Carey (2017, 8) points out, the difference between distrust and mistrust is that "distrust is more likely to be based on a specific past experience, whereas mistrust describes a general sense of a person's unreliability". Lack of trust, on the other hand, is simply the absence of trust. In this case, we are merely undecided, so we do not trust, but nor do we distrust. If trust means that people have positive expectations despite some fundamental uncertainty, the lack of trust is the absence of such positive expectations. Similarly, the lack of distrust should denote the absence of negative expectations (Hawley 2012).

Now that I have provided some definitions, I will signal the similarities between the three concepts. A first point to make is that, just like trust, distrust and mistrust describe a general attitude that leads to (un)favorable expectations, which stem from perceptions of (un)trustworthiness, (un)knowability, and (un)predictability. All three concepts originate from a conscious and rational assessment of reality but also have an unconscious and emotional dimension. All of them are always related to conditions of risk and uncertainty, in the sense that they help us deal with other people's freedom and autonomy. In fact, both distrust and mistrust help us mitigating risk and bridging uncertainty. At the same time, they support our search for ways to subvert the vulnerability and over-reliance in other human beings. These concepts are also relational because they are always directed towards others, being those individuals or collective entities. Finally, and just like trust, distrust and mistrust can be located at both the personal and the systemic level (Bertsou 2019).

But there are also significant differences between these concepts. The first one is that while trust leads to a virtuous circle of further trust, effective institutions and trustworthiness, distrust and mistrust lead to a spiral of suspicion, ineffective institutions, and untrustworthiness. In this sense, all three (trust, distrust, and mistrust) are social

phenomena whose reproduction entails a cyclical and self-reinforcing dynamic. However, this dynamic actually works in opposite directions. Also, a second significant difference between them is that while trust is self-disconfirming, distrust and mistrust are not. "As the old adage states, 'it is easier to destroy trust than to destroy distrust'" (Bertsou 2019, 225). As Bertsou rightly points out, once failure or betrayal occurs, misplaced trust will result in distrust. But once is there, misplaced distrust will not offer opportunities for disconfirmation. In other words, since relations of distrust (even if they are unjustified) lead a person to avoid being put in a vulnerability position again, she will not have the necessary information and experience to dispel distrust. Overall, the fact that distrust is not self-disconfirming makes it extremely difficult to counter. That is why dispelling distrust requires a disproportionate amount of time and effort on behalf of both parties.

Another critical debate for the present research is how distrust emerges? Interestingly, in a recent article, Bertsou provides some answers to this question when discussing the concept of *political distrust*. According to Bertsou (2019), political distrust is a perception of untrustworthiness that results from three broad types of evaluations: technical incompetence and failure, conduct that violates shared notions of right and fair, and conduct that is incongruent with the citizens' best interest. So, according to this definition, distrust in one's government would be motivated by an examination of its capacity to fulfill a specific task that leads to a judgement of its technical incompetence. Therefore, distrust in a state actor reflects the belief that this actor is incapable of fulfilling the technical requirements that are attached to its functions. Second, this technical evaluative component of distrust must be supplemented with an ethical one. Thus, political distrust is intrinsically normative, as attitudes of distrust are expressions of the belief that there is something fundamentally wrong, unfair, and unethical about the processes, conduct, and/or outcomes produced by the political system (Bertsou 2019).

Money and trust

Since the emergence of the social sciences in the early 19th century, money studies have always been a very popular research topic. Throughout history, not only economists but also anthropologists, historians, philosophers, and sociologists have held heated discussions on the nature of money and its consequences for capitalist market societies. Undoubtedly, within these debates, discussions on money and trust have occupied a

prominent place. However, it is essential to keep in mind that, often, this debate has not necessarily been addressed using this specific concept. While sociologists have extensively discussed why people trust in money, economists have more often referred to this issue by asking themselves what are the reasons that lie behind money's universal acceptance. In either case, the fact remains that, at some point or another, all major social sciences have engaged themselves with the questions of why do people trust in (accept) money, where is this trust grounded and how is it (socially) produced and reproduced? Yet, despite almost two centuries of semi-permanent research on money, there are still significant gaps in our understanding of these issues. Luckily, discussions about money still occupy a predominant place within social sciences nowadays, and scholars from diverse academic traditions continue to make essential contributions to our current knowledge of contemporary capitalist credit money and its inner dynamics. Contemporary studies of money span sociology (Dodd 1994; Ganβmann 1988; Ingham 2004; Zelizer 1994), anthropology (Graeber 2012; Guyer 2004; Hart and Ortiz 2014; Maurer 2011; Parry and Bloch [1989] 1996), economics (Aglietta 2018; Orléan 2014; Smithin 2002b; van der Spek and Van Leeuwen 2018; Wray 2002), history (Desan 2014), political economy (Bell 2001; Braun 2016; Giannini 2011; Redish 1993), law (Pistor 2017), literary studies (Poovey 2008), and philosophy (Frankel 1977). In the following pages, I will summarize the research on money and trust with the aim to offer a detailed overview of the topic while, at the same time, providing the reader the coordinates to locate my perspective within the specialized literature.

Money and trust within mainstream economics

While it is undeniable that the field of economics has made outstanding contributions to current debates on money and trust, the truth is, most of the time, this debate has not been addressed as such. Even if economists have often discussed why people accept money as a means of payment, they have only rarely used the concept of trust to address this issue. Naturally, this absence is already very telling. Although classical economists –i.e., Smith, Knapp, Innes, and Keynes-, made essential contributions to the debate on money and trust, their studies on this topic have mostly been taken up again by political economists and economic historians, but, only rarely, by mainstream economists themselves. Meanwhile, debates on money and trust within contemporary economics (or, actually, on money and confidence) have remained limited to some specific areas. One example of

these debates is the studies on exchange rate movements and currency crises (Krugman 2000; Obstfeld 1996; Reinhart and Rogoff 2009). Another exciting debate is that regarding the relationship between money and the state among proponents of modern monetary theory (Wray 2002), which I will refer to in the next section.

In the meantime, orthodox economic theory has been satisfied with reproducing the definition of money as a neutral and functional commodity whose ultimate purpose is to make market exchange more efficient by providing liquidity. In such a view, trust in money is not a topic of discussion. In fact, mainstream economics does not theorize trust in money but simply ignore it or take it for granted. According to economic orthodoxy, money is simply a commodity within the economy, which is just like any other commodity except for the fact that it fulfills three crucial functions. That is to say, money is, at the same time (i) a unit of account, (ii) a means of payment, and (iii) a store of value. In other words, money is, all at once: (i) an abstract system that allows us to calculate and compare prices, (ii) a material element that simplifies exchange, and (iii) an object that preserves purchasing power over time (Dodd 1994, xviii). But if money is, in the end, no more than a technology that allows societies to avoid the so-called 'double coincidence of wants' which characterize economic systems based on barter, it then comes as no surprise that, from this standpoint, trust is no longer an issue. And indeed, to the extent that money is seen as a commodity that allows societies to overcome the inconveniences attached to an economic system based on barter, the reason for its acceptance is not public trust but a rational preference towards efficiency. It follows then that there is no room for an explicit debate on money and trust within orthodox economics. On the contrary, for most economic orthodoxy, the answer to how money gets into society has been dismissed as irrelevant. "As Milton Friedman famously remarked, economics might just as well assume that money is dropped by helicopter and then proceed with the analysis of the effects of different quantities on the price level" (Ingham 2004, 11).

The widespread diffusion of the traditional idea that money is a commodity that emerged as an optimizing response to the technical inefficiencies of barter, and whose acceptance is due to its economic efficiency (and not to extended monetary trust) owes a lot to monetarism. Mainly associated with Milton Friedman and the University of Chicago, the monetarist school became very popular in the late 1970s and early 1980s and had considerable political influence in many of the advanced industrialized nations (Smithin

2003). Even if, as a practical policy doctrine, monetarism was very short-lived (actually, it scarcely lasted a decade in the United States and the United Kingdom), this school of thought was one of the most influential ones within economics. Indeed, the conservation of the underlying monetarist theory of money within mainstream economics is one of the best examples of its influence (Smithin 2002b). However, it must be noticed that the *commodity theory of money* is very old (Ingham 2004). Fundamentally, this theory derives from the Aristotelian philosophy, which conceptualized money as a *thing* that acts as a medium of exchange within the economy because it possesses intrinsic value. Later on, during the 17th and 18th centuries, Aristoteles' ideas on money were taken up by many of the most influential political philosophers, such as Locke, Petty, Hume, Cantillon. They subscribed to the essentials of this theory. And yet again in the 19th and 20th centuries, the founders of economic science (Marx, Smith, Ricardo) also endorsed this view on money (Ingham 2004, 16).

One necessary clarification is crucial at this point. As the reader might have already noticed, debates on money and trust go hand in hand with underlying theories of money. This is because any explanation on how trust in money is produced and reproduced within society ultimately depends on a set of underlying assumptions on what money is and how it works. In this regard, if one agrees with the monetarist assumption that money is a neutral commodity, a commodity that has no influence over real economic variables (at least not in the long run), extended money use needs no further explanation. In other words, if money is a *thing* that, even if it acts as a medium of exchange because it possesses value, is just like any other commodity in the economy, this means that it can be perfectly understood using the orthodox methodology of microeconomics: supply and demand, marginal utility, and so on (Ingham 2004, 7). Naturally, this explains why within the monetarist paradigm, trust plays no role in understanding how money works and why it is widely used. The ultimate proof of economic orthodoxy's indifference towards the question of why do people trust in money stands out the moment we open any economic textbook. Once we move to the section that describes the IS-LM model - the model commonly used to illustrate a closed economy's behavior in the short term -, we realize that the quantity of money demanded in the economy is positively correlated with two variables: the interest rate and the increases in total spending, or income. Strikingly, in this model, the only factors that influence the amount of money that a person decides to have are the amount of money that she or he earns per month and the interest rate paid by

the bank. How to explain then situations like widespread distrust in money leading to extended dollarization of savings and bank runs? Mainstream economics models have little to say about these kinds of phenomena.

Monetarism's indifference towards money is, of course, truly paradoxical. As Smithin (2003) has rightly pointed out, originally, monetarist economists did seem to place monetary policy and monetary theory at the very center of their concerns, drawing the attention of the economics profession to issues of monetary theory and monetary policy. However, in light of the ultimate outcome, it is doubtful whether, in the end, monetarism itself did much to re-establish the view that money matters within economics. On the contrary, such doctrine always tended to deny the importance of money and monetary factors in determining economic outcomes, thus making money "at once very important and yet unimportant" (Smithin 2003, 20). And indeed, one could correctly argue that, according to orthodox economic theory, "the theory on which we were all 'brought up' in the words of Keynes" (Smithin 2002a, 1), capitalists' economies could very well be moneyless. Occasionally, some orthodox economists had claimed that the development of money must have made some difference to the economic system when money was first introduced. They argued that money probably improved the efficiency of economic exchanges and reduced transaction costs. However, monetarist economists' most common assumption is that, once money was firmly established, subsequent changes in the monetary variables no longer have an impact in the real economy (Smithin 2002b). So, ultimately, variations in the quantity of money can only affect the level of prices, but not the output and growth in the economy. So real economic outcomes would be the same regardless of whether the monetary system existed or not. Thus, for all we know, from the monetarist viewpoint, economics remains a science that deals, fundamentally, with the *real* economy (materialized in the exchange of goods and services, as opposed to the accumulation of financial resources). Thus, logically, such science is not concerned with how trust in money emerges and spreads among society (Smithin 2003).

From what I showed so far according to economic orthodoxy, trust in money plays no role in explaining money's widespread use. Indeed, mainstream monetary theory, the theory developed after the important contributions of Hicks, Modigliani, Friedman,

Patinkin, and Tobin[10] (Smithin 2003, 20), treats money as one among several other assets that individuals can hold within a market economy. Thus, mainstream monetary theory reinforces the idea that there is nothing particularly unique in money that would require a specific form of trust. But this overall picture of debates in money and trust within orthodox economics is not entirely correct. At least one realm within contemporary economics has paid more attention to the fluctuating nature of trust in money and its consequences. I am referring to studies on monetary instability and currency crises. Working at the crossroads between economics, political economy and economic history, there is a group of scholars who, for more than four decades, have been studying the causes, consequences, and dynamics of currency and financial crises (Claessens and Kose 2013; Engelen et al. 2011; García and Olivié 2000; Glick and Hutchison 2012; Kindleberger and Aliber 2015; Krugman 2000; 1979; Lomelí 2005; Minsky 1982; Obstfeld 1996; Reinhart and Rogoff 2009; Rother 2009; Sachs 1989; Soto Esquivel and Correa Vázquez 2008; Streeck 2011).

Hyman Minsky (1982) was one of the first economists who focused on studying financial instability and the critical role of debt structures as one of its leading causes. Since the 1970s, a group of economists has taken up the tradition of studying financial crises and shown that excessive debt accumulation often poses high systemic risks, making economies vulnerable to crises of confidence (Reinhart and Rogoff 2009). Among these works, studies of currency crises are of particular interest for understanding the mainstream economics approach to the study of trust in money (or, as these studies say, confidence). Notably, these studies have argued that financial markets can be quite fragile and subject to crises of confidence. Still, even if many of them highlight the fickle nature of confidence in money and its dependence on the public's expectations regarding future events, they mostly emphasize the strategic nature of such confidence. Thus, these studies primarily see confidence in money as a rational, individual, and deliberate decision. Even more so, they understand collective confidence in money as nothing but the result of aggregated individual decisions, or, at the most, the consequence of heard behavior.

[10] In particular, I am refering to the influence of the following works in mainstream approaches to money within economic orthodoxy: Hicks (1935) *A suggestion for simplifying the theory of money*, and (1937) *Mr. Keynes and the classics*; Mogidliani (1944) *Liquidity preference and the theory of interest and money*; Friedman (1956) *The quantity theory of money: a restatemen*t; Patinkin (1965) *Money, Interest and Prices*; and Tobin (1958) *Liquidity preference as behavior towards risk*. On this topic, see Smithin (2003).

Studies on currency crises started gaining in importance in the 1970s when the breakdown of the Bretton Woods system and the abandonment of the gold-dollar standard gave way to a period marked by increasing speculative capital movements and greater monetary instability. Even if currency crises had been a recurrent feature of the international economy ever since gold and silver coins were replaced by paper, after 1971, they started playing a central role in world affairs. Understandably, from that moment onwards, they also became an important subject of academic study (Krugman 2000). It is essential to keep in mind that theories of currency crises have evolved as the nature of such crises has changed (Claessens and Kose 2013). In particular, the literature evolved from an initial focus on macroeconomic fundamentals as the main drivers of currency crises during the 1970s and 1980s, to an increasing emphasis on the importance of expectations. Since 1997, these studies also started to stress that currency crises can be contagious and unleash other types of financial crises (i.e., banking crises). Three generations of models are typically used to explain the currency crises that occurred during the past four decades (Glick and Hutchison 2012).

First-generation models mainly emerged as economists tried to explain the currency crises of the 1970s and the sharp devaluations that followed the Latin American debt crises of the 1980s. In the post Bretton Wood era, as currency speculation increased dramatically, countries found it increasingly problematic to maintain a fixed exchange rate successfully (Eichengreen 2019).[11] In a world where currencies were no longer tied to the dollar, the slightest indication that a country was considering adjusting its exchange rate could expose it to massive capital outflows. This, of course, discouraged the authorities from even contemplating such a change. However, the defense of a fixed and immovable parity was not simple either. Since markets challenged the values of currencies they suspected were unsustainable, the defense of a fixed exchange rate could require unprecedented intervention levels in foreign exchange markets. First-generation models highlighted the role of macroeconomic fundamentals (especially fiscal deficits, debt levels, and falling reserves), as the main drivers of currency crises. The seminal papers are those by

[11] As Mundell (1962) and Fleming (1962) showed, a country cannot simultaneously have (i) a fixed or managed exchange rate, (ii) an independent domestic monetary policy (that is, control of domestic interest rates), and (iii) free capital mobility. The impossibility of simultaneously achieving these three goals is usually referred to in the literature as the Mundell-Fleming trilemma. Moreover, given that, since 1971, international capital mobility has increased considerably, most contemporary authors highlight the trilemma has morphed into a dilemma. This means that a country that pegs its exchange rate to another country's currency must give up on pursuing an independent domestic monetary policy.

Krugman (1979) and Flood and Garber (1984). They argue that inconsistencies between domestic macroeconomic policies (such as an exchange rate commitment and a persistent government budget deficit that, in the end, must be monetized), eventually lead to a currency crash. The reason behind such an inevitable outcome is that governments cannot deplete reserves or borrow indefinitely to support an ultimately unsustainable exchange rate parity. Therefore, inconsistencies in macroeconomic fundamentals end up, sooner or later, in a sudden speculative attack on the currency, which leads to its collapse. First-generation models, thus, highlight the mechanical link between weak macroeconomic fundamentals and currency crashes.

The second-generation models were born due to first-generation models' inability to explain a series of emerging market crises that occurred during the early 1990s (such as the European monetary system's crisis of 1992-93, and the Mexican crisis of 1994). Interestingly, these crises called into question the mechanical link between macroeconomic fundamentals and currency crises and proved that the only requirement for a speculative attack on a currency to be successful, was that the investors' bet against the currency was strong enough. In fact, in the post Bretton Woods era of fiat and floating currencies, challenging currencies' values became a profitable business. In a world where strong investor sentiment against a currency could cause massive capital flight, even those macroeconomically sustainable currencies could be beaten by the unparalleled power of financial markets. To explain this new reality, second-generation models incorporate the interactions between market actors and governments into explanations of currency crashes. They focus on self-fulfilling market expectations and how they can lead to multiple equilibria.

Well represented by Obstfeld (1996), second-generation models stress that money fundamentals cannot, in and by themselves, trigger a currency crisis. From this standpoint, the most critical triggers of a currency crisis are economic agents' lack of confidence in money and their devaluation fears. Typically, in these models, doubts about a government's willingness to maintain an exchange rate target can cause different outcomes. If investor sentiment against the currency is sufficiently strong, a speculative attack against the currency unleashes, leading the authorities to implement measures to sustain the exchange rate target (such as raising domestic interest rates). But, given that such measures tend to dampen economic activity and raise bank funding costs, they

increase the costs of defending the currency even further. Thus, in the end, fears of devaluation and lack of confidence in a currency's value tend to bring about changes in fundamental economic parameters, which increase the costs of maintaining the exchange rate target. As the costs of maintaining the exchange rate level raise, private agents' fears of devaluation grow still more, leading to a vicious cycle (García and Olivié 2000). In these models, self-fulfilling prophecies are possible. If private agents expect a devaluation, the costs of maintaining an exchange rate target rise until, eventually, the government is forced to devaluate the currency. So, there is a negative feedback loop between fears of devaluation and the deterioration of economic fundamentals, which eventually leads to a crash. Notably, second-generation models emphasize that financial markets can be quite fragile and subject to crises of confidence and that speculative attacks on fixed exchange rates can blow up overnight, hitting seemingly stable long-lived regimes. In fact, because they incorporated these variables, these models could explain why there were crises that should not have occurred but did. Ultimately, they occurred because the agents participating in the market expected them to occur.

I will come back to the importance of shifting expectations and lack of confidence in money within these models. Before that, it is important to notice one more feature of second-generation models. That feature is that, according to them, other outcomes are equally possible. Indeed, within these models, it is precisely the shifting nature of expectations that allows for different outcomes or (in their terminology) different equilibria. When market expectations are not sufficiently strong to unleash a speculative attack, and economic fundamentals remain unchanged, the economic authorities can sustain the exchange rate indefinitely. Thus, the crisis does not occur. Lastly, it is also possible that other equilibrium situations may occur during the time that the government is defending the exchange rate target, and economic agents have fears of devaluation (Obstfeld 1996).

Third-generation models are harder to characterize in simple terms, but generally, they focus on how distortions in financial markets and banking systems can lead to a currency crash (Glick and Hutchison 2012). Mostly based on the empirical observation that exchange-rate and banking crises often co-occur, these models focus on analyzing the transmission mechanisms behind this co-occurrence. According to Mühlich (2014), three variants of third-generation models can be identified. The first strand emphasizes that

currency crises are related to the widespread use of foreign currency denominated financial liabilities. The second strand sees them as linked to a lack of prudential regulation. And the third strand stresses they are connected to capital account deregulation. Remarkably, most third-generation models start from the explicit or implicit recognition that international monetary relations are hierarchically organized and that developing economies are subject to the unequal dynamics of the global financial markets, which makes them more prone to experience financial crises. In this regard, these studies tend to emphasize that, due to the importance of shifting expectations as triggers of currency crises, these crises can be very contagious. These models were motivated mainly by the Asian crises of the late 1990s (Claessens and Kose 2013).

To sum up, based on what I showed, it is clear now that second- and third-generation models of currency crises do take the role of (negative) expectations and (dis)trust in money into account when trying to explain the dynamics of contemporary financial markets, particularly the occurrence of currency crashes. Studies of monetary instability within contemporary economics rightly point out that confidence in money is a crucial element within present-day financial markets. With currencies no longer tied to any commodity like gold, and exchange rates that float freely, the instability within financial markets has increased dramatically. Logically, in such an unstable environment, uncertainty and lack of trust regarding a currency's value can quickly spread among financial markets, thus triggering disciplinary actions on the part of economic actors, ultimately leading to a financial crash. In this regard, contemporary economic theory clearly shows that, due to the fickle nature of confidence in money, exchange rates can collapse in a puff of smoke. Still, economic fundamentals remain essential, even if they cannot in and by themselves, trigger a crisis. In fact, economic theory rightly shows that there is a fundamental link between financial crises and debt. What one does see, again and again, in the history of financial crises is that when an accident is waiting to happen, it eventually does. When countries become too deeply indebted, they are headed for trouble. But it can be challenging to guess the exact timing of a crisis. In fact, crises that seem imminent can sometimes take years to ignite (Reinhart and Rogoff 2009).

All these findings are essential and help to bring trust in money to the forefront. Still, mainstream economics' approach to the study of trust in money poses many problems. One such problem is that studies of monetary instability within economics tend to

overemphasize the speculative and rational aspects of trust in money. By stressing that currency crashes result from speculative attacks, these studies unrealistically assume that shifts on market actors' expectations regarding money's value are always deliberate, rational, and conscious decisions based on well-founded analysis and calculations. From this standpoint, a speculative attack on a currency is, ultimately, a good business. Thus, market actors voluntarily engage themselves in such attacks because they want to make profits. Moreover, in these models, market actors' decisions are based on rational assessments, which are ultimately grounded in an unbiased analysis of complete information that lead to optimal solutions. Put differently, this scholarship's approach to the study of confidence in money is grounded in two very old mainstream economics assumptions: the premise that markets are always efficient (and that prices reflect complete information), and the premise that actors' expectations are rational. Of course, this is not to say that economists do not admit that, sometimes, financial crises appear to be driven by irrational factors. The idea of *animal spirits* (as a source of instability within financial markets) has long occupied a significant space within the literature attempting to explain crises (Kindleberger and Aliber 2015; Minsky 1982; Shiller 2017). But, for the most part, irrational factors are precisely seen as that: irrational behavior, deviated conducts, and market anomalies that can, only occasionally, account for specific divergences from overall trends (Kraemer 2013).

Moreover, the second weakness of economics orthodoxy's approach to money and trust is that this literature interprets trust as an individual decision. Even in those cases where economists agree that trust in money goes well beyond the individual level, collective confidence in money is seen as nothing more than the result of aggregated individual decisions. Another common approach (especially within behavioral economics) explains collective shifts in confidence as *herd behavior*, a concept that refers to situations where financial actors display herd-like behavior in their decisions to buy or sell an asset (or, in this case, a currency). Upon closer inspection, herd behavior is described as an expression of so-called contagion effects and is mostly attributed to information cascades (Kraemer 2013). But again, the problem is that these models insist on leaving aside the important role of social institutions in shaping collective beliefs and perceptions regarding the sustainability of money's value. So, all in all, economic models of currency crashes fail to consider the importance of culturally shared beliefs, social structures, and institutional settings for understanding trust in money and its dynamics. To sum up, I share with these

studies the aim of explaining sudden shifts in monetary trust, which can ultimately lead to a major currency crash. However, I differentiate from them sharply in calling attention to the importance of monetary institutions (and of the state) for understanding the dynamics that surround trust in money.

Sociopolitical approaches to money and trust

The orthodox idea that money is a neutral commodity whose widespread use is due to its effectiveness in facilitating exchange has been under attack since the beginning of the 20th century (van der Spek and Van Leeuwen 2018). One of the most important critiques to the orthodox view was initially developed by some classical economists (i.e., Innes, Knapp, and Keynes), who put forward what has become known as the chartalist approach to money. According to this view, money is a creature of the state. It is a unit that acquires both its validity and its value as money because of the coercive power of the state and its ability to levy taxes on its citizens, taxes which have to be paid in the state's own currency. From this standpoint, money is *whatever* the state announces it will accept in payment of taxes. It follows that trust in money is linked to the certainty that the state will continue to accept *that* which has been defined as money at the established price in payment for taxes. Thus, money's acceptance does not depend on any inherent property or function of the actual means of payment.

Once again, competing definitions on what trust in money is, ultimately, depend on underlying theories of what is money. In fact, as I have already shown in the previous section, the typical textbook story argues that money emerged spontaneously, from some hypothetical, pre-existing, ancient economy based on barter, to make market exchange more efficient. In this regard, within the commodity theory of money, money's most distinctive function is being a *medium of exchange*, so exchangeability is the distinctive feature of money. Money is, essentially, the most liquid commodity, the commodity that it is exchangeable for all others. In sharp contrast, from the chartalist point of view, money's most important feature is being a *unit of account*. From this view, money consists of *claims* and *credits*, not merely tradable objects or their symbols. For chartalists economists, money is, above all, *transferable debt*; it is a social relation of credit and debt denominated in a unit of account. Indeed, in the most basic sense, the possessor of money is owed goods. Put differently, according to the chartalist view money is an accounting

system, which is independent of any real money stuff (in the anthropologists' lexicon); is "the means of translating the work of the barber into that of the farmer and of producing action at both spatial and temporal distance" (Ingham 2004, 4). In this conception, money is an abstract measure of value that makes it possible to compare the values of different things using the same scale.

Quite ironically, it was precisely during the height of the gold standard when two economists, well-known today, started to argue that there was no evidence for believing that modern monetary economies evolved from ancient societies based on barter. For them, the essence of money was not to be a medium of exchange, but an abstract measure of debt. These economists were Mitchell Innes and Georg Friedrich Knapp, who were among the first to lay the foundations of what is still considered the basis of the chartalist (or state) theory of money. For those paradoxes of history, one of the most important contributions to the state theory of money was published in 1913, the same year in which the Federal Reserve Bank was established in the United States, and the country completed the construction of a sovereign monetary space that was defined by a dollar money of account based on a gold standard (Ingham 2004). Indeed, in 1913 and 1914, Mitchell Innes published two remarkably iconoclastic articles that appeared in the influential New York monthly publication, *The Banking Law Journal* (Innes 1914; 1913). In those pieces, Innes made a concise critique of the commodity theory of money and pointed out that "there was never any such thing as a metallic standard of value" (1914, 379). Obviously, in an intellectual climate dominated by metallism, Innes' ideas did not have a favorable reception, but in fact, they caused short-lived indignation and a disdainful response from the established economic orthodoxy that relegated his views to oblivion (Ingham 2004). However, Innes was fundamentally correct. At about the same time, Georg Friedrich Knapp, an economist linked to the German historical school of economics, also contributed to giving shape to the chartalist theory of money. Knapp's *State Theory of Money* (1924), first published in German in 1905, also opposed the metallist view, which stated that the value of money derived from that of precious metal (i.e., gold or silver). For Knapp – just like for Innes –, money was not a medium that emerged from exchange. Instead, money was a means for accounting for and settling debts, the most important of which were tax debts. Indeed, in Knapp's view, money was *that* which is accepted at the public pay offices. Therefore, he considered absurd to separate the theory of money from the theory of the state, since it is the state that creates money by declaring *what* it will

accept for the discharge of taxes. So, ultimately, the state establishes both the items that will serve as money and the nominal unit of account, which defines the exact value of money. In this way, the state establishes both the *validity* and the *value* of money. It follows that trust in money is nothing but trust in the state's commitment to maintaining the value of money, a value defined by the very same authorities that are the recipients of the taxes. Trust in money's value is thus the positive expectation that those authorities will keep their promise of accepting what they defined as money at the established price.

At this point, three crucial clarifications are essential. The first one is that, according to the chartalist theory of money, the existence of an authority is a necessary condition for money's existence. As a result, money cannot be produced by the free interplay of economic interests in the market, nor emerge from barter. So, from this standpoint, the existence of money inevitably involves the question of sovereignty and raises the further question of the political nature of the relationship (or contract) between the guarantor of money's value and its users (Ingham 2004, 49). Related to that, there is a second important point to notice. From the chartalist perspective, the state is not the only issuer of money; rather, it is the state's acceptation which is decisive (Knapp 1924, 95). Therefore, credit notes and bills, issued by banks and denominated in the state's money of account, become money when they are accepted as payment of tax debts owed to the state and reissued in payment to the state's creditors (Knapp 1924, 143). This point uncovers a vital distinction within the chartalist view: the distinction between money's *validity* (or valuableness) and money's *value*. The basic idea is that money possesses a specific quality of valuableness, or validity, as opposed to its particular value, or purchasing power. States confer the quality of validity by accepting the tokens as payment for taxes and using them to make their own purchases. The substantive value of money is a closely related, but, none the less, distinct question (Ingham 2004, 48). In a metallic monetary system, the state establishes the value of money when it fixes the conversion rates, for example, so many ounces of silver or gold for a dollar or a pound. Finally, a third important point to be taken into account is that, since states confer moneyness, they can potentially allow different things to circulate and be used as money. This means that a whole range of different means of payment can circulate within an economy as money, and in reality, they do. In fact, not only have diverse objects successfully been used as money in different cultures and at very different points in time (from precious metals and metallic coins in Western Europe to cowry shells, leather, tobacco, cocoa and cattle in Africa and America). More

importantly, within contemporary capitalist credit economies, there are different means of payment that circulate simultaneously within a single monetary space: cash money, coins, debit cards, credit cards, checks, promissory notes, and traveler's coupons, to name just a few. This multiplicity of money forms has several implications for how contemporary capitalist credit money functions, one of the most important of which is that monetary systems are hierarchically organized. Indeed, in contemporary capitalist economies, there are various financial claims circulate as money whose quality varies depending on the issuer (Bell 2001). I will come back to this point in a later section.

Debates over the nature of money and trust continued during the 20th century. In fact, the state theory of money influenced many renowned thinkers, such as Max Weber and Georg Simmel. Later on, John Maynard Keynes also incorporated many of these debates in the general conclusions of his *A Treatise on Money* (1930). Moreover, in recent years, some heterodox economists within post-Keynesian economics and modern monetary theory have revived many of Knapp's and Innes' classical ideas on money and explored the reasons that lie behind its widespread universal acceptance (Bell 2001; Smithin 2003; Wray 2002). But the most important contemporary debates on money and monetary trust as sociopolitical creations that, ultimately, result from the power of the state have been held by political economists, especially those focusing on the study of central banks (Binder 2017; Braun 2014; 2016; Giannini 2011; Haldane and McMahon 2018; Holmes 2009; Lockwood 2016; McNamara 2002; Riles 2018; Wansleben 2018). Both neo-chartalists scholars within post-Keynesian economics and modern monetary theory,[12] and political economists who study central banks share many ideas about money and trust. Most importantly, just like the classical chartalists, they all argue that monetary trust is a socio-political creation. In this regard, these scholars highlight the important role of the state and the monetary institutions for the emergence of trust in money. Logically, for both groups, trust in money features systemic characteristics. An important remark is that all these scholars consider that social scientists can aspire to build a reasonably precise historical understanding of the nature of money, its historical creation, and contemporary

[12] It must be noticed that authors from very different disciplines can rightly be included within the neo-chartalist framework, from some post-Keynesian economists (such as Stephanie Bell and Annina Kaltenbrunner), to economists within modern monetary theory (Randall Wray), as well as sociologists (like Geoffrey Ingham, Bruce Carruthers, and Aaron Sahr), legal scholars (Katharina Pistor), historians (Christine Desan), and academics coming from regulation theory (André Orléan, Michell Aglietta, Bruno Théret), among others. In this section, I use the label mainly to refer to the first two groups mentioned above (post-Keynesian economists and economists within modern monetary theory).

workings. This epistemological position is essential because, as Braun states, "a precise understanding of the economic workings of credit money is a prerequisite for the analysis of the social phenomenon of monetary trust" (Braun 2016, 1068). However, in some other aspects, both these approaches differ significantly from each other. In the following, I will summarize some of the main similarities and differences between neo-chartalists scholars and political economists studying central banks concerning the study of money and trust. Of course, this task does not exhaust, nor does it intend to exhaust, the varied number of topics that these studies address.

The first important point to highlight is that, just like the classical chartalists and in contrast to political economists, neo-chartalists scholars do not bring the concept of trust into play when they refer to the reasons that explain the universal acceptance of money. Both post-Keynesian economists (Bell 2001) and economists who adhere to modern monetary theory (Wray 2002) state that money's universal acceptance is mostly a result of the state's coercive power. Thus, it is the state's coercive power that allows it to impose taxes on its subjects and establish which means of payment should they use to pay their tax debts. These scholars draw attention to the concepts of coercion and force. They point out that it was precisely because of their coercive capacity that nascent modern states managed to extend monetary transactions based on credible metal standards to populations and areas where private and personal exchange modes were still dominant. In this sense, one criticism one can make to these studies is that they do not address how monetary trust is socially produced, nor do they try to identify what social and political processes may be involved in such production. Instead, neo-chartalist works limit themselves to point out that, since time immemorial, nascent modern states' coercive capacity has been the reason why money has become widely accepted as a unit of account (and store of value, and medium of exchange) within market societies. In sum, within neo-chartalists approaches to money, state coercion precedes the emergence of any kind of trust. Thus, for many neo-chartalists, existing approaches to the study of trust in money (including predominant approaches within sociology) forget that monetary sovereignty is (or was) established, mainly, through extreme physical coercion (Ingham 2004, 65). In fact, practices such as branding on the forehead with coins and execution for counterfeiting were usual in ancient times. Still, the question of how monetary sovereignty is socially produced and reproduced today is not addressed by neo-chartalist economists.

A second point to be noted is that, in contrast to the orthodox tale that claims that money emerged as a solution to the inefficiencies of barter, the neo-chartalist view of money as an institution that developed in parallel to modern states is historically well documented. Moreover, drawing on evidence from other social sciences, such as history, anthropology, numismatics, and sociology, neo-chartalists authors themselves have made great efforts to support their own claims (Ingham 2004; Wray 2002). And in fact, as far as we know, all the evidence about the origins of money points to state involvement and the shared origins of money, debts, and writing in the palaces' tax levies (Aglietta 2018; Graeber 2012; Wray 2002). For example, there are records of tally debts (in the form of clay tablets) in Mesopotamia that are at least 2,000 years older than the oldest known coins (Graeber 2012). There is also evidence to sustain that coins were probably invented to give the population a convenient means for paying taxes and that the use of early coins as a medium of exchange was probably an "accidental consequence of the coinage, and not the reason for [their invention]" (Wray 2002, 46). An important implication follows from this point, which is essential for studies of money and trust. While most social-philosophical approaches to money (for example those predominant within the sociology of money) "generally subscribe to the epistemological position that the fundamental constitution of money is somehow unknowable"; neo-chartalists scholars and political economist alike shun away from that position. In contrast to most sociologists, neo-chartalists scholars and political economists argue that a reasonably precise historical "understanding of the nature, making, and workings of contemporary credit money is possible" (Braun 2016, 1068). As I mentioned before, this claim is crucial for the present research, because, to understand monetary trust, we first need to understand money. That means that the question of how trust in money develops is inextricably linked to the questions of how money and monetary institutions developed historically, and how money works today. Auspiciously, there is a tradition of sociopolitical studies on money in which we can build on to address these questions. This tradition includes mainly the neo-chartalists and the political-economists who study central banks. Still, other scholars studying money from different academic disciplines (such as Geoffrey Ingham, Aaron Sahr, and Christine Desan) have also made important contributions in this direction. Overall, these scholars share the idea that knowing money is something social scientists can aspire to, as long as we can disentangle the material processes and the institutional architecture that led to the emergence of capitalist credit money as we know it today. As I will show in the last two sections of this chapter, trust creation in contemporary capitalist

credit money can only be understood once we understand the complex architecture of modern money.

I will focus now on studies of central banks within contemporary political economy. It is important to highlight that these studies do address, explicitly, the question of how monetary trust is socially produced and reproduced today. Moreover, they try to identify what social and political processes may be involved in such production. Within the field of political economy, monetary trust is commonly defined as "trust in [money's] future purchasing power and trust in the continued convention that a payment is complete when money changes hands" (Giannini 2011, xxv). According to this definition, trust in money is based on two main features: its capacity to maintain its value and to settle debts, both in the present and the future. Clearly, a central bank's actions are an essential part of fulfilling both conditions. This fact shows how crucial institutions they are for building trust in a currency. It is not surprising then that political economists have devoted considerable efforts to analyze the role of these institutions as ultimate guarantors of the value of money within contemporary capitalist economies. These studies have mainly focused on studying how central banks legitimize their actions and sustain monetary governance. Still, in doing so, they have shifted the discussion of monetary trust to a discussion of how central banks create *legitimacy* and *governability*, thus building and ensuring the preservation of *credibility* in both money and the monetary authorities (Braun 2014; 2016; Giannini 2011; Haldane and McMahon 2018; Holmes 2009; Kaelberer 2007; Lockwood 2016; McNamara 2002; Riles 2018; Wansleben 2018).

The first characteristic of central bank studies within political science is that they interpret trust in money as a collective and impersonal creation that develops through regular institutionalized practices. This is an interpretation I share. Moreover, in this view, trust in money is, above all, an abstract and impersonal relationship of reliance. It is a relationship that emanates vertically from the citizens to the state. Citizens rely upon the commitment of the monetary authorities. Thus, within studies of central banks, as well as in this dissertation, trust in money is *systemic trust* (Braun 2014; Kaelberer 2007; McNamara 2002; Riles 2018; Wansleben 2018). In particular, scholars working on central banks tend to emphasize that, while barter trade could rely on some elements of personal trust between individuals, monetized exchange is abstract. Since money is essentially a system that subjects participants to playing by given rules, people often have very few

options when it comes to the use of money. As Luhmann also pointed out, anyone who relies on the stability of the value of money and on the continuity of a multiplicity of opportunities to spend it assumes that a system is working and trusts that function, not people (Luhmann 1982).

The second characteristic of these studies is that they highlight the importance of the trust taker in creating a 'fiction of trust' (Beckert 2005) as the base for trust in money. Even if these studies do not explicitly refer to Beckert's concept, or to Goffman's concept of *dramaturgic action*, they follow these two ideas in pragmatic terms. In fact, these studies interpret trust in money as a collective and impersonal construction emerging from the concrete actions performed by specific individuals (the monetary authorities) who act as legitimate representatives of the central bank. Accordingly, one of these studies' primary focus is the analysis of the actions carried out by both policymakers and central bank governors and their interactions with their audiences. In this sense, it is important to notice that, with notable exceptions (Braun 2016; Kaelberer 2007), most these papers do not use the concept of *trust* when referring to money. Instead, they mostly refer to how central bankers create and sustain their *legitimacy* as the primary makers of monetary policy, and how they ensure monetary *governance* and enhance *credibility* in money (Braun 2014; McNamara 2002; Wansleben 2018). These studies tend to emphasize the political nature of monetary governability and trust. Also, they stress the fact that, ultimately, to enhance credibility in money, central bankers need to actively engage in specific actions and act as "the faithful spokespersons of collective monetary beliefs" (Orléan 2008, 8). Thus, ultimately, it makes sense that these studies refer to the concept of *credibility* in money, rather than to that of trust. In fact, the former stresses more the active role of central bankers in the production of trust in money. Crucially, these studies highlight the importance of three key elements which are the basis of a central bank's authority: (i) its legal status, (ii) its expertise and (iii) its embeddedness in the political and social environment (Kaelberer 2007). First, the authority of a central bank always rests, to some degree, on the exercise of state power. That is, it derives initially from an act of political fiat. Thus, the monetary authorities' continued commitment to maintaining the value of the currency is one of the essential foundations for credibility in a currency. However, state power is not the only source of a central bank's public legitimacy and monetary credibility. The second source of a central bank's authority is its expertise and competence. However, as Braun notices, central bankers cannot always have the

population as a whole to understand all the nuances of monetary policy. Thus, ultimately, they need to instill trust (Braun 2016). In this regard, the third source of a central bank's authority is its successful interaction with its broader political and social environment. Indeed, one of the main challenges for monetary policymakers is to manage expectations and inspire trust in the monetary authority and in money itself (or, to use their own terms, to generate legitimacy, governability, and credibility). Therefore, it is reasonable that central banks' communication strategies have become one of the privileged topics of analysis within political economy (Lockwood 2016).

To sum up, in this dissertation, I draw on many concepts proposed by both neo-chartalists economists and political economists studying central banks. I have already mentioned some of them on passing. Still, I want to stress two crucial ideas that I share with many of these studies. First, I share the idea that trust in money is a sociopolitical construct, which is grounded at the institutional level. Moreover, just as these studies, I consider that even if trust in money is an impersonal and collective construction, it can be (and is) fostered by the actions of the monetary authorities. In other words, I share the idea that trust in money is, at the same time, actively fostered and systemically grounded. However, I differentiate from these studies in signaling that, despite the actions carried out by central bankers to foster trust, for trust in money to exist and endure, societies also need *passive* monetary trust. In other words, what this means is that trust in money can only be partially actively fostered. Yet, in the long run, for trust in money to exist and endure, monetary routines must also be maintained. Besides a successful management of expectations and crises on behalf of the central banks, trust in money is also grounded in successful money use. In the following section, I will come back to the importance of routines and habits for fostering trust in money, an idea which has mostly been developed by sociologists and anthropologists studying money.

Money and trust within sociology and anthropology

Over the last few decades, a growing number of scholars within sociology and anthropology, in Europe and the United States have placed money at the core of their concerns. Without doubt, contemporary studies of money remain one of the most dynamic fields within modern sociology and anthropology (Bandelj, Wherry, and Zelizer 2017; Carruthers and Ariovich 2010; Dodd 2014; Dufy and Weber 2009; Graeber 2012; Guyer

2004; Hart and Ortiz 2014; Ingham 2004; Parry and Bloch [1989] 1996; Polillo 2011; Sahr 2017; Zelizer 1994). Broadly speaking, two main approaches can be identified within contemporary social studies of money. First, a set of rather theoretical analyses that share a common critique to the orthodox definition of money as a neutral device and whose main aim has been to elaborate a theory of money capable of accounting for money's social and historical character (Carruthers and Ariovich 2010; Dodd 2014; Graeber 2012; Ingham 2004; Polillo 2011; Sahr 2017). Second, a group of studies whose main interest has revolved around the question of money's social meanings (Bandelj, Wherry, and Zelizer 2017; Dufy and Weber 2009; Hart and Ortiz 2014; Maurer 2011; Zelizer 1994). Among these studies, Viviana Zelizer's work has been path-breaking. Zelizer's fundamental contribution was recognizing how individuals use money in several ways to create, signal, and maintain their relationships with others (Bandelj, Wherry, and Zelizer 2017; Zelizer 2007; 1994). Also, somewhat across the board, a potentially third approach to the study of money within contemporary sociology could be identified, namely, a strand of research which focuses on the relationship between households and the universe of finances and the rapid expansion of financial practices in the everyday life of millions of families. Studies of *financialization* (Van der Zwan 2014) have extensively documented the transformation of financial practices that occurred since the late 1970s due to the market liberalization' trends of the post Bretton Woods era. In this sense, even if this literature does not explicitly focus on the topic of money and trust, it provides a good overview of the financial repertoires and the uses of money which are present in contemporary capitalist economies (Davis 2009a; Fligstein and Goldstein 2015; Fourcade and Babb 2002; Krippner 2011; Langley 2008).

As I will show in the following, only a minor part of contemporary sociology and anthropology of money explicitly deals with the study of trust in money. However, one could sort studies of money within sociology and anthropology into, at least, two groups that make substantive contributions to our understanding of how money gets into society, why individuals accept it, how do they use it in their daily lives and how these uses are shaped and reproduced socially. On the one hand, there is a set of studies that focus on the different practices and *financial repertoires* used by different social groups (Davis 2009a; Fligstein and Goldstein 2015; González 2015; Krippner 2011; Langley 2008; Van Gunten and Navot 2016). One of these studies' main focus is how people in contemporary capitalist societies use money for different purposes and assign multiple meanings to it

within each transaction (Bandelj, Wherry, and Zelizer 2017; Dufy and Weber 2009; Zelizer 2007; 1994). On the other hand, there is a set of studies that build on the theoretical contributions made by three French economists linked to the French school of regulation (Aglietta 2018; Orléan 2014; Théret 2007a). Mainly, these works analyze the effects of monetary instability and financial upheaval upon society, especially, how crisis lead to the emergence of public debates on money and its multiple and contested meanings (Bandelj, Wherry, and Zelizer 2017; Carruthers and Babb 1996; Dufy and Weber 2009; Hart and Ortiz 2014; Luzzi 2017; 2013; Neiburg 2010; Parry and Bloch [1989] 1996; Roig 2016; Théret 2007a; 2007b; Wilkis and Carenzo 2008; Zelizer 2007; 1994).

Before delving deep into these two strands of literature, there is a critical remark that concerns all the studies of money I analyze in this section. That is that, despite few notable exceptions (Ingham 2004; Sahr 2017), studies on money within sociology and anthropology have generally (explicitly or implicitly) relied on the notion coined by Marcel Mauss ([1925] 2002) a century ago of *total social fact* to interpret money. Building on this concept, sociologists and anthropologists alike have stressed that, just like many other social phenomena, money is essentially a multidimensional institution that has social, moral, material, political and religious facets (Aglietta 2018; Aglietta and Orléan 1990; Carruthers and Ariovich 2010; Dodd 2014; 1994; Dufy and Weber 2009; Graeber 2012; Hart and Ortiz 2014; Orléan 2014; Théret 2007a; Zelizer 1994). In this sense, these studies define money as an expression of the social totality and its conflicts. Thus, they deeply challenge the orthodox conception of money as merely an economic instrument that is both socially and economically neutral. Undoubtedly, one of the great achievements of these studies is that they have unequivocally shown that money is, indeed, a complex social institution with multiple facets, and, as such, it is much more than a pure economic object that circulates within markets. Certainly, we have learned from these studies that, beyond its pure economic attributes and functions, money is also a means of communication within society (Ganβmann 1988), a social network (Dodd 1994), a permanent cause of cultural debate (Carruthers and Babb 1996), a source of collective identity (Kaelberer 2007), and a cultural artifact that is appropriated through different practices (Dufy and Weber 2009; Zelizer 1994). Thus, social studies of money have broadened our understanding of money and cast a spotlight on the endless cultural uses of money and its social meanings, both of which go well beyond money's mere economic features. However, more often than not, the approach to money as a 'total social

fact' has also led scholars to shy away from the study of money as a crucial socio-historical institution of capitalist societies. In other words, with some exceptions, sociologists and anthropologists mostly ignore the question of how money reproduces itself institutionally. Instead, they focus on analyzing how money works as a cultural device or how it ignites fierce battles over its multiple meanings (Guyer 2004; Hart 1986; Hart and Ortiz 2014; Maurer 2015; 2011; Maurer, Nelms, and Swartz 2013; Parry and Bloch [1989] 1996; Zelizer 2007; 1994). However, with few exceptions (Holmes 2009; Riles 2018) they disregard both the study of the institutions that constitute money (i.e., the central bank, the government, and the financial sector) and the analysis of the mechanisms by which money is institutionally reproduced, including the sources and channels that foster monetary trust. In sum, these scholars systematically neglect the study of money as, precisely, money; that is, they overlook the study of the social processes by which money reproduces itself as a crucial economic institution at the core of contemporary capitalist economies. As stated in a previous section, often, this omission stems from an epistemological position (explicitly or implicitly) shared by these studies. As Bjerg (2014, 149) and Braun (2016, 1068) notice, mostly these studies subscribe to the idea that "the fundamental constitution of money is somehow unknowable" and that "any attempt to build a coherent theoretical conception of money is bound to fail" (Dodd 2005, 571). As I have already pointed out, in this dissertation, I shun away from this epistemic position. In line with sociopolitical studies of money, I claim that social scientists can aspire to understand the nature, making, and workings of contemporary capitalist credit money. In turn, this understanding is essential to disentangle the theoretical and empirical underpinnings of trust in money.

One of the most significant contributions to the study of trust within sociology and anthropology of money comes from the works of three French heterodox economists associated with the school of regulation, namely, Michell Aglietta, André Orléan, and Bruno Théret. They were among the first scholars to emphasize that, to understand how money works within contemporary capitalist societies, social scientists should start from the analysis of trust in money (Aglietta 2018; Aglietta and Orléan 1990; Orléan 2014; Théret 2015). In particular, they underline two very crucial points for the study of money and trust. First, that to understand the reproduction of money as a social institution, one should begin with an analysis of the 'social faith' in money, in other words, of monetary trust (Orléan 2008). Second, that social scientists should investigate episodes of monetary

disruption and contestation because these are privileged occasions to look into the social production and reproduction of trust in money. In fact, early on, these three economists pointed out that it is precisely during crises when the black box that money is during normal times suddenly opens-up, and that is the reason why these episodes constitute privileged windows for the analysis of trust in money (Aglietta 2018; Aglietta and Orléan 1990; Orléan 2014; Théret 2007a; 2007b). However, these studies have failed to specify what crises reveal about money that, ultimately, leads to social discontent, a limitation I will try to overcome in this study.

As a rule, in their different works, these economists distinguish between three different forms of trust in money, which they call *methodical, hierarchical,* and *ethical* trust (Aglietta 2018; Aglietta and Orléan 1990; Orléan 2014; Théret 2007a; 2007b; 2015). Methodical trust (a term they link to the English term 'confidence') denotes the routinary dimension of trust in money. It is the trust that emerges from routines and daily practices and leads social actors to accept money in exchange for goods simply because they are confident that all other individuals will accept that money in the future at the same price. Within this definition, methodical trust in money is partly rational, and it is reproduced in a mimetic way, that is, through the mechanism of imitation (Orléan 2014, 114). Hierarchical trust (a concept these scholars relate to the English term 'credibility') refers to the political dimension of trust in money. It is the trust that is actively produced by the state. It is vertical trust, a kind of trust that emerges due to the actions carried out by the political authorities. Thus, hierarchical trust is linked to the power of the money-issuing institutions which guarantee money's value. Finally, ethical trust (a concept related to the English term 'trust'), is the symbolic trust that results from the alignment between the rules that govern money issuance, distribution and destruction, and the values of the community where a specific currency circulates. It is trust in the principles that underpin monetary policies. Ethical trust is connected to the ethical-political project of a specific society and its conception of the common good. Ultimately, it is the trust in money's capacity to represent the values held by a specific society (Aglietta 2018, 58).[13]

[13] It is worth noticing that the concepts of *methodical* and *hierarchical* trust used by Aglietta, Orléan, and Théret correspond to the two dimensions of trust I signal in this dissertation, namely passive (or routinely) trust and active trust or credibility.

The works on money and trust carried on by economists from the regulation school gave rise to a long tradition of money studies within sociology and anthropology. In this tradition, debates on money have been inextricably linked to those of trust. Most of these studies emphasize that people accept money as a means of payment only because they assume money will maintain its purchasing power over time. Thus, they see trust in money's enduring value as the ultimate source of money's generalized acceptance (Dufy and Weber 2009; Luzzi 2013; Neiburg 2010; Roig 2016; Sánchez 2016; Wilkis 2013; 2014; Wilkis and Carenzo 2008). Moreover, this literature highlights that monetary crises are privileged windows for the study of trust in money. During crises, trust in money denaturalizes, thus becoming a variable that social scientists can analyze. As trust breaks down and money moves from obscurity to political center stage, the institutional grounds of trust in money reveal themselves. Thus, it is because trust in money falls apart during crises, that its different dimensions unfold, and social scientists can analyze them in detail (Aglietta 2018; Aglietta and Orléan 1990; Orléan 2014; Théret 2007a; 2007b).

As stated above, these studies emphasize that monetary crises reveal the intrinsically social, political, and symbolic dimensions of money (Théret 2015). Most of them show that, during crises, money ceases to be an everyday instrument and becomes a motive of public debate. In this regard, they stress how the denaturalization of trust in money that occurs during episodes of financial upheaval leads to an outburst of social representations on money. Indeed, social studies of money extensively document how, during episodes of monetary instability, widespread emotional distress translates into the emergence of social debates on money's validity and the nature of its value (Carruthers and Babb 1996; Luzzi 2013; Neiburg 2010; Roig 2016; Théret 2007a; 2007b). Moreover, these studies also demonstrate how crises provoke moral and political conflicts regarding the possible definitions of money and its legitimate uses (Luzzi 2012). In fact, money's meanings is one of these studies' primary focus (Zelizer 1994). Thus, most of them analyze public discourses in social media, newspapers, magazines, and television. They mostly study how social actors engage in heated public debates and use different metaphors to reinterpret money (Luzzi 2013; Luzzi and Wilkis 2019; Neiburg 2010). In this regard, they highlight money's cultural dimension, which expresses itself in money's contested and conflicting meanings. Eventually, some of these studies also analyze how, during crises, monetary practices change, and social actors' decisions on how to use money become increasingly complex (Luzzi 2012; Plasencia and Orzi 2007).

However, the critical point is that even if many of these studies rely on the works of Michell Aglietta, André Orléan, and Bruno Théret - who explicitly claim trust in money has multiple dimensions -, they have mostly limited themselves to the study of monetary routines and how crises transform them. Alternatively, they have focused on studying how multiple meanings emerge during crises. But for the most part, social studies of money have systematically overlooked the study of money's political dimension (Bandelj, Wherry, and Zelizer 2017; Carruthers and Babb 1996; Luzzi 2013; Neiburg 2010; Roig 2016). Moreover, most of these studies explicitly focus on the analysis of money and trust 'from below'. Thus, they stress the importance of studying individual economic practices, of "following the actors", "reconstructing their financial repertoires", and "taking seriously the meaning these practices have for them" (Luzzi 2013, 205). A typical concern of these studies is the analysis of the strategies used by social actors to personalize and distribute money. Two key concepts are those of *framing* and *earmarking*, which were proposed by Viviana Zelizer (1994) more than twenty years ago. These concepts refer to how social actors distinguish money according to its origins and destinations, and how they separate and sort 'different' monies according to their specific uses. However, as stated previously, the problem is that, by focusing exclusively on money's cultural dimension, these studies overlook money's unavoidable economic and political dimensions. With few exceptions, these studies rarely focus on how the financial system's dynamics or central bankers' actions shape money as a socio-political institution. Interestingly, a few papers within this tradition have brought up the idea that monetary crises have 'pedagogical effects' among the population (Neiburg 2010; Sigal and Kessler 1997; Spitta 1988; Théret 2007a; 2007b), an idea that I consider central. Unfortunately, these papers have not specified where these pedagogical effects ultimately lie; in other words, what is that people learn about money during crises that end up undermining their trust. As I will show in the next section, in this dissertation, I engage with this question directly and try to explain what exactly people learn from monetary crises that they did not know before. Moreover, I link this 'learning process' to money's institutional reality and its need for a successful politic of expectations to function correctly.

At the crossroads between studies of money and studies of financialization, there is a strand of literature that studies the various routinely uses of money within contemporary capitalist market economies. These works study the various ways of paying, borrowing,

investing, and saving that social actors employ in their daily lives. Remarkably, these works account for several factors that shape the social uses of money. First, they point out that monetary practices differ among different social groups. Consequently, there are different monetary and *financial repertories* within societies, which can be specific to different sectors or social groups. These studies rightly describe the different economic strategies social actors use to consume, save, or invest. They also analyze the individual processes of decision-making that are behind the different options. Primarily they focus on those strategies directly linked to the financial system (Fourcade and Babb 2002; Grigoryeva 2016; Langley 2008).

Second, these studies highlight the importance of cultural factors in shaping these different financial repertoires and show how they spread across society (Kuzina and Dodd 2014; Wilkis 2013). For example, in a recent book, Luzzi and Wilkis (2019) describe the cultural process that led to the 'popularization of the dollar' in Argentina. Through this process, buying cash dollars became an increasingly common practice among Argentines to preserve their savings from the loss of value caused by the countries' chronic inflation. In particular, the authors emphasize how the national press, graphic humor, theater, and television programs all play a role in bringing these monetary practices closer to the population. Third, these studies stress the importance of social class, economic welfare and financial literacy as variables that have a determinant influence in shaping financial repertoires (Fourcade and Babb 2002; Grigoryeva 2016; Hilgert, Hogarth, and Beverly ; Navickas, Gudaitis, and Krajnakova 2014; Titus, Fanslow, and Hira 1989). Finally, these studies also account for the global economic and socio-political processes that, in recent decades, led to the rapid expansion of finances in the everyday life of millions of families in the developed and the developing world, a process that began in the late 1970s (Davis 2009a; 2009b; Fligstein and Goldstein 2015; Krippner 2011; Langley 2008). For the most part, they refer to this process using the concept of *financialization* (Van der Zwan 2014). In particular, this literature shows the profound transformation of consumption habits that occurred in recent decades and the increasing importance of debt and credit, particularly in low-income sectors (González 2015; Hornes 2014; Wilkis 2013). Besides, this literature also studies what happens at the top of the social pyramid and describes the strategies used by elites and economically privileged groups when trying to preserve their wealth from the losses caused by financial crises or taxes (Atkinson and Piketty 2010; Harrington 2016; Keister 2014).

Even if the general rule is that these studies do not explicitly analyze the social reproduction of trust in money, I include them in this section because they contribute to understanding this process to the extent that they address the routinary reproduction of money and its uses within society. These studies do analyze how money is used daily as a generalized means of exchange and provide an overview of the different factors that influence and shape economic practices and money's daily uses. As noted before, these studies underline the crucial role of social and cultural factors in shaping daily monetary practices. They stress the importance of social class, economic status, cultural background, personal preferences, education level and financial literacy in shaping the uses of money. They also stress how emotions, feelings, beliefs and identity play an essential role in the social reproduction of money. Moreover, they also stress the importance of global financial dynamics in fostering specific money uses (Fligstein and Goldstein 2015; Langley 2008). Overall, these works help us understand how money is collectively reproduced as a social institution due to socialization, routine, and familiarity.

To sum up, at least two strands of social studies of money have contributed significantly to our understanding of how money reproduces itself socially. On the one hand, a set of studies that explicitly focuses on how trust in money denaturalizes during crises, forcing social actors to resignify their economic practices and engage in new money uses. These works call attention to the multiple rationalities that shape how people use money and have inspired a whole generation of researchers, thus fostering the discussion between sociologists, historians, anthropologists and other scholars from neighboring fields (Bandelj, Wherry, and Zelizer 2017; Dufy and Weber 2009; Hart and Ortiz 2014). These studies also stress how, during a crisis, social actors involve themselves in a constant exercise of symbolic definition and redefinition of money. This exercise inextricably leads to the emergence of public debates on money's multiple and contested meanings. On the other hand, a set of studies of financialization and uses of money focuses on the various financial repertoires different social groups have and on the transformation of financial practices caused by the global financial trends that have been occurring since the late 1970s.

Unmistakably, all these works have (explicitly or implicitly) started from a perspective on money as an institution that is socially reproduced through routines and daily uses, that means, passively. Thus, sociology and anthropology of money highlight the role

played by socialization, imitation, and repetition - in other words, of *mimesis* (Orléan 2014) – as factors that help to explain why people use money in a certain way and not in another. These studies not always explicitly refer to the concept of trust. However, they help us understand how trust in money emerges as a natural by-product of successful socialization into a monetary economy, and how it reproduces itself due to habits and routines which are mostly unconscious and, to a great extent, collective. They show how, due to the endless repetition of exchanging money for goods, people become used to use money as a means of payment. It seems only logical then that the ways in which people use money are shaped by social and cultural factors, including social class, economic status, cultural background, personal preferences, education level, financial literacy, beliefs, culture, and identity.

In this research, I follow these studies in their assessment that to understand money, we need to pay attention to its social uses. Moreover, I also share the interest of putting trust at the center when analyzing money and considering that this trust is deeply connected to the promise that money will preserve its purchasing power in the future (in other words, that money will *store value*). However, I differentiate from them in considering that trust in money is not only passively but also actively reproduced and in seeking to integrate the passive and the active dimensions of trust in money. Also, I depart from the analysis of money as a language, a cultural artifact embedded in society (a topic extensively investigated), and highlight the potential social sciences still have to contribute to the study of money as a key economic institution within capitalist societies and its socio-political modes of reproduction.

Trust and the working fictions of money

So, after this extensive overview of debates on money and trust, it is time to go back to our original questions: *what is trust in money*, *where is this trust grounded*, and *how is this trust socially produced and reproduced*. In other words, where does trust in money come from? What are the mechanisms by which monetary trust is produced and reproduced within society? Who produces this trust? Can trust in money be lost? If so, is it possible to restore it?

In this dissertation, in contrast to economics and in line with a long tradition in sociology, anthropology, and political economy, I conceive trust in money as systemic trust. As I have already stated in the previous sections, I support the idea that systemic trust in money can be fostered (and it is) by individuals who act as legitimate guardians of money's value (i.e., the monetary authorities and monetary policymakers). At the same time, I consider trust in money is produced and reproduced within society thanks to both monetary routines and sociopolitical processes of trust creation. In other words, I consider that trust in money has two fundamental dimensions: a passive dimension and an active dimension. Thus, following studies of money within the fields of sociology and anthropology, I consider that trust in money is, in part, a by-product of routine and habit, a consequence of the endless repetition of successful money use. Thus, to no small extent, trust in money is *passive*, practical, pragmatic trust. It is an attitude that emerges as the logical by-product of monetary routines and the successful use of money from an early age (Ganβmann 1988). However, unlike many sociologists and anthropologists, I also consider that trust in money does not exhaust itself in its passive, unconscious, and routinely dimension. Drawing on a tradition of sociopolitical studies on money, I consider that there is also an *active*, socio-political dimension of monetary trust. This active trust is a socio-political construction that, ultimately, relies on the enduring promise that money has and will keep its purchasing power over time. Here, the state, the monetary authorities, and the financial sector play a crucial role. Indeed, if, in addition to being rooted in successful monetary routines, trust in money needs to be socio-politically established, this means that academics must explore how the government and the central bank, above all, try to generate this trust. My argument is that to produce trust in money, the state and the government (materialized primarily in two institutions: the central bank and the ministry of economy and/or finance) need to produce an image of the long-lasting value of the national currency. For this, they have to reproduce and nourish socially shared monetary beliefs. At the same time, to fully understand the social reproduction of trust in money, social scientists also need to study the roles of the media and the networks of economic experts. Daily, these actors submit monetary imaginations to private and public scrutiny; therefore, they contribute to legitimize or undermine trust in money. However, again, it is essential not to lose sight that the everyday social reproduction of monetary beliefs (which, as I will show, are the very base of trust), is equally grounded in both monetary routines and politically nourished monetary credibility. In sum, both the passive and the

active production and reproduction of trust in money must be at work for money to work correctly.

It follows from the statements above that, even if, to no small extent, trust in money "is created and maintained through discursive processes that take place between the actors in the field and the general public" (Beckert 2016, 129), trust in money is equally grounded in social actors' continual successful experiences with the monetary system. In turn, these positive monetary experiences rely on the maintenance of monetary stability. That is to say that, to a great extent, trust in capitalist credit money requires that money maintains its actual purchasing power over time. However, for this to happen, many institutional conditions must also be met, among them: the government and the central bank must be committed to maintaining price stability; the transmission mechanisms of monetary policy must function properly; the government must maintain fiscal discipline; the exchange rate must be relatively stable; the regulation and supervision of the banking system must be effective; there must be a central bank capable of properly fulfilling its role as lender of last resort; and, least visible of all, the payment system of the economy must function properly (Braun 2016, 1070).

In sum, from the above, one can infer that money must be conceived as an institution ultimately grounded in social practices, material facts, and future expectations that are sustained by political means. Accordingly, trust in money must be understood as grounded in these three components. So, again, my argument is that trust in money is both, the product of monetary routines (which, of course, ultimately rely on the successful material reproduction of money as an economic institution), as well as a sociopolitical creation which rests on the ability of the monetary authorities and the government to keep the promise of money's present and future value alive. Thus, both - the passive and the active - dimensions of trust are equally important, and both alike nourish the *promise of value* that keeps money rolling over. In turn, this promise of value is nothing but the state's commitment to the people, that money has value today, and that it will continue to have value in the future. People must then not only trust that payments will be completed every time money changes hands. Even more importantly, they must also trust that money has value now and will have value in the future. Now, the question is, how is this promise of long-lasting value socially constructed?

If trust in money is grounded in shared collective beliefs (Orléan 2008) then what are these beliefs? In this dissertation, I build on the hypothesis put forward by Benjamin Braun (2016), that trust in contemporary capitalist credit money is mostly grounded on a set of socially shared beliefs on what money is and how it works - what Braun calls the prevalent *folk theory of money* -, which is a complete upside-down version of the money institution and its inner workings. Moreover, even if I agree with Braun that these widespread erroneous beliefs are not so much the consequence of a malicious conspiracy as the contingent debris of previous stages in the history of money; I claim that the preservation of - at least some aspects of - this folk theory of money is crucial for sustaining the institutional scaffolding of capitalist credit money. According to Braun, the folk theory of money prevalent in western societies nowadays consists of three myths, namely: (i) that all money is created equal (and thus non-hierarchical), (ii) that banks are intermediaries, and (iii) that money is exogenous, and can thus be controlled by the central bank. In agreement with Braun, I consider these myths (or fictions) regarding money are indeed at work in contemporary western societies. However, in this research, I depart from Braun in signaling two other fictions that are also part of collective monetary beliefs and which, I will argue, are at the very base of trust in money. In other words, I expand Braun's conception of the folk theory of money by adding two further fictions whose existence I consider crucial, especially for the topic this dissertation address, meaning the study of how trust in money is socially produced and reproduced. In a nutshell, my argument is that trust in contemporary capitalist credit money is ultimately grounded in a promise of value. This promise of value, in turn, relies on three fictions of money, namely, the fiction that money is wealth, the fiction that money has (and holds) a stable value, and the fiction that all money is created equal.[14] Moreover, I consider that preserving these fictions is crucial for money's reproduction as a social institution. In this sense, they can be regarded as *working fictions of money*. In the following, I draw on a set of academic and historical data and fieldwork insights to propose, as a hypothesis to be tested, an interpretation of where is trust in money grounded in capitalist market economies. The goal of this study is not to provide the last word but to make a first step in this direction, thus blazing a conceptual trail for future research on trust in money while, at the same

[14] The reader must keep in mind that the fiction (or myth) that (i) all money is created equal was signaled by Braun (2016), together with the fictions that (ii) banks are intermediaries, and that (iii) money is exogenous. The other two fictions – that (iv) money is wealth, and that (v) money has a stable value -, are a new addition that I develop in this dissertation. Still, the two new fictions are potentially complementary to those signaled by Braun. All five fictions could eventually be integrated into a more comprehensive version of the folk theory of contemporary capitalist credit money.

time, providing an example on how historical and empirical research on the topic can be carried out.

The argument I put forward in this dissertation is that, in contemporary capitalist's societies, trust in money is grounded in the promise that money will maintain its value and that, as a consequence, we will be able to use it to settle debts both in the present and in the future. However, this promise of value rests on a set of shared beliefs and misconceptions about the nature of money's value. To trust in capitalist credit money, people must believe in its enduring value, but this belief rests upon a shared (inaccurate) notion on where this value is grounded. In this regard, as I will explain in the following, my argument is that, while always specific to a given currency and a particular context, the promise on money's enduring value is always grounded in a set of shared misconceptions on what money is and why is it valuable in the first place. To be more specific, I argue that, for people to trust in the enduring value of money, they need to believe in three fictions of money, which, when put together, provide an erroneous image on money's nature and on the reasons why money is capable of storing value. The first of these fictions is that money's value stems from money's (supposed) objective and material reality. In this sense, I argue that to trust money will keep its value over time, people need to believe that *money is wealth*. Second, and related to the above, to trust in money people need to believe that *money's value is constant*, this means, that money has a (relatively) stable value, a value that does not change over time (or changes very little) and that is, therefore, more than a human creation. Finally, to trust in money's long-lasting value, people need to believe that all money in circulation has the same economic and legal status; that is, that *money is homogeneous*. This implies that people must not only forget (or ignore) money's immaterial and conventional nature, but also its hierarchical structure within contemporary capitalists' economies. So, for money to be trustworthy and continue to function correctly, the promise of money's enduring value, and the working fictions in which this promise is grounded, must be at work.

It is now time to take a closer look at these three fictions of money. Money is complicated, and it is hardly surprising that the popular theory of money is wrong in all significant respects. In fact, for the most part, the history of money has consisted of a succession of different ways of obfuscating its true nature, namely: (i) that money is an immaterial unit of account, an accounting system, and a network of credit-debt relationships; (ii) that its

purchasing power is a convention institutionally sustained by the commitment of the state; and (iii) that, in capitalist economies, money is organized hierarchically. Undoubtedly, much of the blame for this misconception lies with orthodox economists, who have engaged themselves with spreading right and left two ideas which had a crucial role in shaping our collective beliefs about money's value: the ideas that *money is a commodity* that *is capable of storing value*. As I pointed out earlier in this chapter, for most economic orthodoxy, money is a commodity whose value stems from its material characteristics. In this conception, money has an *intrinsic* value that originates in the value of the specific materials (i.e., precious metals such as gold and silver) of which money is made, and it is linked to their specific characteristics (their brightness, weight, durability, resistance, malleability, etc.). This conception of money as a commodity is, in turn, complemented by a second notion that money is capable of storing value towards the future. Thus, it seems only logical that when put together, these two ideas convey an (erroneous) image of money as an object with an intrinsic, stable, and enduring value; a valuable commodity capable of maintaining its value towards the future; an image of money as long-lasting wealth. These are, indeed, the two myths upon which the promise of value that sustains trust in money is grounded: the myth that money is an asset, it is wealth, and the myth that money has a stable value which stems for its material reality and that will last over time. However, nothing could be further from the truth.

What is money's true nature? As I have already pointed out, money is not material wealth; it is not an asset. On the contrary, money is credit; it is transferable debt. As the chartalists rightly showed, in its purest nature, money is a unit of account, an accounting system whose uniqueness rests in its ability to make comparable the prices of different goods against each other. Thus, in contrast to widespread social beliefs of money as a form of material wealth, the truth is money is an *immaterial unit of account*, a complex accounting system, a language capable of translating into a single tongue the value of things that would otherwise be incomparable. At most, money is *credit*; it is a legal right to claim goods in the future. But, whatever it is, money is not a material asset. Again, at best, money is only a right that has the potential to be a material asset. This, then, is the first fiction on which social trust in the enduring value of money rests: the belief that (fiat) currencies have 'something' behind them, meaning, a substance that supports their value. The second fiction on which trust in money rests is the belief that money's value is stable and enduring. In fact, to the extent that people believe the value of money is an objective

property of money derived from its material constituency, they assume money's value is permanent, constant, something more than a human product. But, again, the reality is that (at least in contemporary fiduciary monetary systems) the value of money is both conventional and contingent; it is an arbitrary number both defined and institutionally backed-up by the state (and eventually, the market). In other words, the value of money, its purchasing power, is no more than a socially-shared and institutionally-safeguard convention. Anyone who observes the dynamics of contemporary currency markets can assess that since the prices of most currencies float freely, they can fluctuate sharply in short periods. So, the truth is that instead of being a material source of endurable wealth, contemporary money is an immaterial system of financial claims whose value is a collective and contingent convention which can, therefore, change sharply. It follows then that there is a fundamental mismatch between what we collectively believe money is and money's true nature.

Finally, the third fiction of money is that *modern money is homogeneous*; it is all-purpose money; it is fungible. Thus, every currency has the capacity to transform itself into a different monetary form (Steiner 2009). Accordingly, the popular saying goes, we believe that 'a dollar is a dollar is a dollar'. That means, we believe legal tender is standard and uniform. However, it turns out that this is not true either. Actually, in contemporary capitalist economies, the quality of financial claims that circulate as money varies, depending on the issuer (Bell 2001; Braun 2016; Mehrling 2012). While in every national economy, there are many different means of payment that circulate as money - cash, bank deposits, credit cards, checks, etc. -, these different types of money are neither economically nor legally equivalent.[15] There is always a unique asset that constitutes the medium of final settlement or 'medium of redemption' (Smithin 2002a, 6). Despite this reality, and again as Braun (2016) noted, the fiction that all money is created equal conceals the differences between all these types of money, especially between *outside* and *inside money*. Outside money, or central bank money, consists of cash (notes and

[15] One clarification is essential. When I state that in modern capitalist economies, different types of money trade at par despite their legal and economic differences, I am referring to the fact that monetary systems are hierarchical in the sense pointed out by Bell (2001), Braun (2016) and Mehrling (2012). This conception must not be confused with the idea proposed by Viviana Zelizer (1994) that within capitalists' societies, money is framed and earmarked; thus, originating a multiplicity of currencies. While the first idea refers to the institutional differences between means of payment with different risk structures, the second notion stresses that, within contemporary market societies, all-purpose money can have different social uses and acquire different meanings. However, these differences remain at the level of social interactions and are not institutional and legal differences, like in the first case.

coins) and reserves (held by a commercial bank in accounts at the central bank). In contrast, inside money is a liability of the banking system created through private bank lending to businesses and households. It consists of bank-created credits held in checking accounts, term deposits, or savings accounts. Legally, only outside money is 'legal tender'. In practice, this means that debts among banks and banks' debts to the central bank or the government, can only be settled in outside money. Economically, the difference lies in the quality of the credit claims that circulate as money. Outside money is the safest asset in the financial system because it is the liability of the monetary authority that, for all practical purposes, has a default risk of zero. Private banks have a real default risk, which is why their liabilities occupy a lower rung in the hierarchy of money (Braun 2016, 1074). So, this means that inside and outside money are different in both legal and economic terms. However, the hierarchical distinction between outside and inside money usually remains hidden from the parties to a monetary transaction by the invisible operation of the payments system which – by trading inside money 'at par' with outside money - creates the illusion of non-hierarchical money and supports the fiction that all money is created equal. Still, contemporary capitalist credit money is hierarchically organized, both at the national and the international levels. Indeed, national monetary systems consist of various means of payment with different risk structures organized in a complex pyramid of private and public promises of future settlement. Equally important, the international monetary system consists of a hierarchy of currencies, at the apex of which is the dollar (Eichengreen 2011). In sum, while conventional economic theory and widespread monetary beliefs support the idea that money is the most liquid and exchangeable asset in the entire financial system and that all money in circulation is fundamentally the same, this notion is entirely false.

At this point, one is forced to wonder, "how could people have entrusted their lives to this dubious co-production of banks and states […] despite the long history of financial scandals and crises extending from the 17th century to our own times?" (Streeck 2018, 143). And the short answer is that because people are fundamentally misguided about money and its capacity to store value. Money is radically different from what we believe it is. We believe money to be an economic asset, the manifestation of material wealth, but it is not; fundamentally, money is credit, it is transferable debt. We believe money to poses intrinsic value, a value that will persist over time. Yet, money's value is a convention whose purchasing power is only ensured by the warranty of an issuing state.

We believe all money within the financial system is fundamentally the same. Again, it is not: money is hierarchically organized. Therefore, not all money is equal both in economic and legal terms. Indeed, the hierarchical nature of money is present at the national level (where central bank reserves and cash top the pyramid) and at the international level, where dollars are not equal to euros, which are not equal to pesos. It follows from the above that the image of money as the most liquid asset, the manifestation of enduring wealth, the most exchangeable commodity, is, to say the least, completely inaccurate. Money's true nature is very different from the feeling of material security that we usually have when we look at the bulky deposits in our bank accounts. "The feeling of personal security that the possession of money gives" described by Simmel (2011, 179), and which he argues "is perhaps the most concentrated […] manifestation of trust in the socio-political […] order", could not be more off-base.

(Dis)believing money: the logics of distrust

At last, the moment has come to address our two remaining questions, namely, can trust in money be lost? And, if so, is it possible to restore it? Indeed, there are many occasions in which monetary trust can be jeopardized and even lost. As Hyman Minsky (1982) rightly pointed out, contemporary capitalist economies are – due to their institutional design - inherently unstable. Therefore, there are many occasions where currencies (especially those at the bottom of the international currency hierarchy) become problematic, either because their value changes continuously or because it becomes highly uncertain. In countless situations, such as in a monetary crisis or during hyperinflation, the equivalency system that sustains a monetary economy breaks down, and the value of the currency changes abruptly or depreciates steadily. In those circumstances of monetary instability and financial upheaval, when monetary routines do no longer hold, and socio-politically established narratives break down, people can cease taking money for granted. But how does this process occur?

As I intend to show in the following chapters, the ultimate reason why trust in money's long-lasting value gets lost is the breakdown of money's working fictions. As I will show, monetary disruptions are events that reveal the immaterial, conventional, and hierarchical nature of money. They show that there is indeed nothing behind money. Therefore, these disruptions may destroy trust in money, thus damaging the money institution to a point

where solutions are difficult. By calling into question the image of money's value as something natural, immutable, and completely immune to social transformation, monetary crises can cause money to no longer serve as such.

Like I will show for Argentina's case, economies long exposed to severe monetary upheavals show how essential the preservation of these fictions is for the proper working of the monetary system. Indeed, if monetary crises tend to have a scandalizing effect on people, this is precisely because, in these moments, people are confronted with money's true nature. To the extent that crises reveal money is not a safe commodity that stores value but an immaterial system of claims whose value is a convention, they cause people to stop taking money for granted. This is why moments of financial upheaval are moments of shock, often leading to an outburst of collective questions about money's multiple meanings and the nature of its value. Because established beliefs break down during crises, social actors find themselves overwhelmed by a situation whose complexity and ambiguity exceeds them. In this sense, economic actors' negative personal experiences with money damage their trust through a 'learning' process and lead to the emergence of distrust. It is not only the disruption of monetary routines but especially the realization that money is not what we believe it is, that causes monetary trust to morph into distrust. However, it should be noted that this 'learning' process is not a conscious realization by which social actors analytically understand the true nature of money's value. Far from that, this is a pragmatic process of realization that leads people to avoid repeating the same 'mistakes' once again. Distrust in money is thus engrained in *habitus*; it is the product of a "long collective history, endlessly reproduced in individual histories, and which can be fully accounted for only by historical analysis" (Bourdieu 2005, 5). It is the succession of monetary crises (that continuously reveals the immaterial, hierarchical, and conventional nature of money), which leads to distrust. It is the long-term exposure of social actors to the regularities of the money institution (that occur through crises), which makes them 'understand' the real nature of money and its inner dynamics. Because social actors incorporate this knowledge in their "social and cognitive structures and their practical patterns of thinking, perception, and action" (Bourdieu 2005, 8-9), their distrust becomes part of their habitus.

This is the paradox of modern money: once people are aware of money's true nature, they do not trust it anymore. This, in turn, makes the politics of expectations on money crucial

to ensure its correct functioning. This is the reason why, as Carruthers and Babb (1996, 1556) rightly notice, money "works best when it can be taken for granted". To a great extent, one could argue that this feature is not exclusive to the institution of money. Indeed, as the anthropologist Mary Douglas pointed out more than three decades ago, to be effective and avoid challenges to their legitimacy, social institutions must appear to be based on "more than conventions" (Douglas 1986, 48). Thus, while it is undeniable that "the objectivity of the institutional world [...] is a humanly constructed and produced objectivity" (Berger and Luckmann 1991, 78), we humans need to naturalize our social world, we need to believe that this world is objective and unchanging in order for it to make sense to us. And indeed, if people became aware of their participation in the collective construction of their daily environment, this environment would suddenly become artificial, vulnerable, and ineffective. Naturalizing the social is, thus, the fundamental basis of institutional stability. In this regard, money is just like any other social institution. However, as I have been pointing out, there is a specificity in money. In fact, to the extent that trust in money is grounded on erroneous beliefs, a dose of reality can break these beliefs down, breaking down trust in money. It is not merely that, through a monetary crisis, social actors learn money's value is a social product, the result of a social convention. Naturally, this realization is crucial. However, above all, what is central is that, through a monetary crisis, social agents fully grasp the true nature of money as both a product of social conventions and a hierarchical institution consisting of a system of immaterial claims. So, it is not only that, to use the same metaphor used by Carruthers and Babb (1996, 1558), for money as a social institution to make sense to us, we must 'forget' (through naturalization) our participation in the creation of money's value. Moreover, we must also forget (or ignore) the immaterial and contingent nature of this value. However, given that monetary crises prevent us from forgetting (or ignoring) the conventional, immaterial, and hierarchical nature of money, they may end up destroying this institution. Thus, to the extent that monetary crises teach us the true nature of money, they prevent collective amnesia. It is precisely because of this collective memory that money can very well stop serving as such. Ultimately, it is deception that leads to disbelief; it is the breakdown of the working fictions of money, the frustrated expectations that money will keep its value, that leads to the production and reproduction of monetary distrust.

In the following four chapters, I will return to the theoretical questions explored in this chapter and address them through a historical and empirical analysis of the Argentine currency. In the next chapter, I will go back to the global history of money and provide a general framework to locate Argentina's monetary history in the broader global scenario. I will delve into the history of the international monetary system from the gold standard to the present, and show how the institutional foundations of trust in capitalist currencies changed over time. I will show how, from the 19th century to the present, trust in capitalist currencies stopped being linked to gold. I will also emphasize that widespread beliefs about the foundations of money's value did not accompany these institutional changes. On the contrary, the fictions of money remained, and so did the image that what makes money valuable and reliable is its link to a particular source of material wealth. Also, I will underline how, from 1944 onwards, the international monetary system's hierarchical character intensified. This exacerbated the monetary problems of countries with dependent economies and weak currencies, among them Argentina.

In chapters 4 and 5, I will describe the long process by which the Argentine state sought to create a reliable and trustworthy currency and sustain trust in its long-lasting value. Through a journey across a long succession of monetary crises of different kinds (which starts in 1880 and continues until the present day), I will show the many attempts made by Argentina's monetary institutions to build and sustain the value of its currency. Since 1946, most of these attempts failed, and the Argentine state's promise to keep the value of its currency broke to a point where solutions are difficult. Finally, in the last chapter, I will describe Argentina's central bank's most recent attempt to restore trust in money and reestablish monetary stability. I will show how, between 2016 and 2018, Argentina's monetary authorities tried to stabilize the economy by implementing an inflation targeting regime. Finally, in a brief epilogue, I will show that, once again, the attempt to generate trust in the currency and stabilize the economy failed. Indeed, in early 2018, a significant exchange rate crisis hit the country and lasted for several months.

In short, in the chapters that follow, I will invite the reader to delve deep together into the history of the Argentine currency. It will be a tortuous story whose path is not always linear. It will also be a story that paradigmatically exemplifies what happens when a society is condemned to permanently remember the conventional, hierarchical, and immaterial nature of money. When collective oblivion is prevented, money breaks down.

Thus, this is the story of an economy in permanent flux and a weak state incapable of sustaining the promise in the national currency's long-lasting value. A state that condemned an entire nation to continuously remember the contingent, hierarchical, and immaterial nature of money. In doing so, it also condemned its people to seek alternatives to try to preserve the value of their wealth. It is a story of material loss and sovereign subordination, which led Argentina's currency to lose some of its fundamental functions. These functions started to be performed by the global hegemonic currency, the US dollar. Through this story, we will dive into the ups and downs of the Argentine monetary history with the ultimate goal of understanding a fundamental sociological question: How is the value of a currency socially constructed?

3. Reshaping value: the transformation of money during the 20th century[16]

In the previous chapter, I argued that to trust in capitalist credit money, people must believe in its lasting value. I also stated that this belief in the value of money rests on a set of shared misconceptions about the nature of money and why money can store value. To trust in the enduring value of money, social actors need to believe in three fictions. The first of these fictions is that the value of money is 'intrinsic' and stems from the materials from which money is made. The second is that the value of money is constant and stable; that means it does not change over time and is more than a human creation. The third is that all money in circulation has the same economic and legal status, that money is homogeneous. In the previous chapter, I showed that these beliefs are mistaken and do not reflect contemporary money's institutional reality. Still, they are present in most western societies. But where do they come from? In this chapter, I will show that these three fictions of money have their origin in capitalist money's history.

During the 20th century, the money institution has suffered significant transformations. Throughout this time, there had been different assessments of the reasons why money has and holds value. The different conceptions have been accompanied by different institutional arrangements and strategies to guarantee money's value. All in all, during the 19th and 20th centuries, there had been different approaches on how to back up the value of capitalist currencies and establish trust in them. I will refer to these different approaches and institutional arrangements as money's *value regimes*. Throughout history, there have been different value regimes for capitalist money. Indeed, capitalist societies have debated multiple times how to assess and maintain money's value, engaging in fierce battles with enormous material and political consequences. An analysis of capitalist credit money's global history shows how these different value regimes have followed one another over time. The general trend has been that money's connection to the material world has become looser and more distant. Since the times in which coins

[16] The historical account provided in this chapter is based on the following works: Aglietta and Coudert (2015); Arceo (2011); Braun (2016); Carruthers and Ariovich (2010); Carruthers and Babb (1996); Eichengreen (2011; 019; 008); Frieden (2015); Ocampo (2016); Redish (1993); Regalsky (2018); Richardson, Gou, and Komai (2018); Richardson, Komai, and Gou (2018); Rougier and Sember (2018b); Sember (2018); Williamson (1977) In the text, I only cite these works occasionally to avoid repetition and facilitate reading. Other works are quoted in parenthesis following the usual criteria.

were made of precious metals and money was a valuable commodity itself, capitalist societies have developed increasingly abstract forms of money and increasingly complex banking systems (Carruthers and Babb 1996, 1558). Monetary historians routinely use the concept of evolution to describe such development. The evolutionary metaphor aptly captures monetary developments since the Industrial Revolution, which saw a unidirectional movement from metallic coins, to paper money convertible into gold under the gold standard, to the gold-backed dollar standard under the Bretton Woods system, to pure fiat money (Braun 2016, 1069).

For centuries, a fairly straightforward 'anchor chain' (Redish 1993) linked money to the physical world via the material identity of money and precious metals. Since early modern times and until well into the 19th century, precious metals (such as gold and silver) were used for the coinage of money. At the time, the ability of money to store value was seen as a result of money's material substrate. The widespread belief was that money had an 'intrinsic' value. During more than five centuries, the conception of money as a commodity with intrinsic value prevailed. Money's value was seen as the result of precious metals' specific material properties: their brightness, weight, durability, resistance, malleability. The argument that genuine money had to possess intrinsic value was typically made by analogy: just as a ruler had to possess length to measure length, so money had to possess value to measure value. The reasoning was that "as the yardstick becomes the measure of length by having length within itself, only metallic money having intrinsic value could become a measure of value" (Carruthers and Babb 1996, 1567). Thus, the ultimate source of trust in the long-lasting value of money resulted from this association between money and precious metals that (were supposed to) had intrinsic value.

The first transformation of capitalist money's value regime took place in 15th century Europe, in the context of long-distance trade, where the problem of shipping specie was greatest. At the time, northern Italian merchants began to develop paper substitutes for coin, and their innovations quickly spread to other parts of western Europe (Carruthers and Ariovich 2010, 26-27). It was risky to transport precious metal over long distances (witness the ongoing predations against Spanish treasure ships traveling from the New World to Spain). Under some circumstances, bills of exchange and promissory notes could function as money and, because they were written documents, were much easier to

transport. Thus, without intending to, the Italians who began to use these financial instruments initiated a crucial and long-term shift of money away from precious metal and towards paper that *represented* precious metal. As I will show in the following, the invention of gold-backed paper money produced two fundamental changes in capitalist money's value regime. On the one hand, this invention transformed the link between money and precious metals. With the invention of paper money, money stopped *being* wealth and became a *representation* of it. However, to be effective, this transformation required the involvement of a political institution, which could guarantee there will be enough gold to back up paper money. At first, such institutions were private banks, but gradually modern states took over the responsibility of guaranteeing money's value in gold (Redish 1993). With this shift, the system of fractional reserves was put in place. This meant that governments and central banks only had to back up a percentage of the paper money in circulation (generally less than 40%) with gold reserves (Richardson, Komai, and Gou 2018). Therefore, not only was money no longer wealth in itself but a representation of wealth. Moreover, the system of fractional reserves implied that states only had to have a portion of the gold necessary to support the total value of the money in circulation. With the invention of gold-backed paper money and the implementation of a system of fractional reserves, the monetary system became more unstable and exposed to the possibility of a crisis of confidence. Still, during the period the gold standard was in place, money's value was always seen as a consequence of the link between money and gold, irrespective of money being coins or paper notes.

The next level of abstraction and elasticity was reached with the international monetary agreement of Bretton Woods. With the establishment of the gold-backed dollar standard in 1944, the dollar was the only currency that retained gold convertibility. The major currencies were pegged to the dollar through a system of fixed but adjustable exchange rates. With this transformation, the link between money and gold became even looser. As the US dollar was the only currency that continued to be linked to gold, trust in money stopped depending only on each issuing state's capacity to keep its promise to preserve money's value. After 1944, the value of all capitalist currencies was inevitably tied to the price of the dollar, and to the US government's ability to keep the promise of converting its currency into gold at the price of 35 dollars per ounce. Since the Bretton Woods agreements were signed, the trust in all currencies started to be inevitably tied to the Federal Reserve's decisions. An important point to highlight is that, since the dollar

became the world's official reserve currency, the asymmetries of the international monetary system increased even further. The problem was not only that the international monetary system's architectural design was already hierarchical, and it prevented any search from symmetry. Moreover, the fact that one specific country's currency started fulfilling the role of global reserve currency made the system even more hierarchical. In contrast to when gold was the international reserve currency, in the post Bretton Woods era, the US became the system's primary beneficiary. Indeed, while gold was the principal reserve asset, there were, in principle, no obvious beneficiaries in the international monetary system. The most powerful country was the one who could appropriate the larger quantity of gold, and this place could, in principle, be occupied by any country as long as its government managed to hoard sufficient gold (Kaltenbrunner and Painceira 2018). However, in the post Bretton Woods era, the situation changed. Since the US was the only country capable of issuing dollars, there was no possible way to challenge US supremacy, except challenging the whole system.

Finally, in 1971, with the breakdown of the gold-backed dollar standard, money's link to the material world was wholly disrupted. When President Nixon ended convertibility in 1971, the link between the US dollar and gold was broken. But since the whole international monetary system relied on the dollar, the consequence of Nixon's decision was that all money became fiat money. Gold stopped being the reference for money's value. Suddenly, money lost its relationship with any material asset. Moreover, due to Nixon's decision, money's value became increasingly self-referential. As money became more and more detached from its material base, trust in capitalist currencies stopped being linked to the promise of turning money into gold. In this new reality, what makes fiat money trustworthy is the certainty that others will accept it as a means of payment for any good or service, now or in the future. In fact, to no small extent, the value of contemporary fiat money stems from its ability to be interchangeable. So, fiat money's value is a synonym of liquidity, is the result of a collective decision to give value to a particular currency or asset. If people believe that a paper dollar has value, if they trust it has, that fact alone is enough to make the dollar a trustworthy currency. Thus, in our contemporary world of fiat currencies, where the relative values of most currencies float freely, money's value has become increasingly dependent on market movements. Moreover, due to these transformations, the management of expectations regarding money became a crucial feature of national and international monetary politics. Political

agreements and government decisions also play a crucial role in determining money's value. In the following, I will describe the transformations of the money institution during the 20th century in more detail.

The value of money from the gold standard to Bretton Woods (1875-1944)

Between 1875 and 1936, the international monetary system was organized according to an institutional arrangement known as *the gold standard*. The gold standard was a system in which gold was the dominant international trade currency. During that time, all the countries that participated in the world trade network had to set the values of their currencies in gold, a practice that encouraged and facilitated international trade. Given that the countries kept the prices of their currencies in gold fixed, they had to buy or sell gold at pre-established prices. Similarly, their gold reserves had to be sufficient to back their money issuance according to the specific conversion rate. Due to this very automatic conversion mechanism, the monetary agencies' activity was limited (at least in theory) to passively monetize trade balance surpluses and, conversely, to contract the monetary base when there was a trade deficit. It was only when foreign currency (mainly pounds sterling) or gold bullion entered a country, that the monetary authorities were able to print banknotes, as many banknotes as metal entered the country's vaults. On the other hand, if for some reason the country's gold reserves decreased, the monetary agencies had to withdraw the excess of money accordingly, taking as many banknotes back from circulation as metal had been exported, and keeping them until a net inflow of gold allowed them to enter the circuit again. For obvious reasons, then, during the gold standard, the policy toolkit at monetary agencies' disposal was extremely limited – or rather nonexistent –, especially when one compares it to the variety of tools central banks have nowadays.

Historically, this was a time in which the conception of *commodity-money* prevailed. The dominant view was that precious metals (gold and silver) had an 'intrinsic' value, a value that resulted from their material features (their brightness, weight, durability, strength, malleability, etc.). According to this idea, money's ability to store value was a consequence of money being made of precious metals. However, when paper notes

started to be used more frequently, this conception started to change. As money stopped being made of precious metals, it stopped *being* wealth and became a *representation* of it. Still, during the gold standard, money's value was always seen as an attribute of money that resulted from the link between money and gold. It is essential to notice that the replacement of commodity money by gold-convertible paper money during the late 19th century coincided with the rise of modern nation-states, which alone had the institutional capacity to implement the shift towards representational money at all levels of the economy. Thus, this was the time when national states began to assume the role of ultimate guarantors of money's value.

Between 1915 and 1930, two significant events disrupted the international monetary system: the First World War and the Great Depression of 1929. The 1920s and 1930s were a time of important changes in money's institutional foundations. On a global scale, significant economic and political transformations followed to the end of the First World War. At that time, one of the biggest global concerns was finding strategies to reactivate international trade and create conditions that could foster political and economic stability. Thus, countries tried to return to the gold standard and stabilize the value of their national currencies (Sember 2018). A first attempt to re-establish the gold standard took place in 1920. In a conference held in Brussels, developed countries reached a post-war monetary consensus, which anticipated many of the changes that were to occur in the following decade. The Brussels consensus stipulated that nations should seek to restore their currencies' credibility by returning to the gold standard. For that, they could choose between restoring the exchange rate of the pre-war period or establishing a new exchange rate parity that was considered sustainable (Aglietta and Coudert 2015). During the conference, the governments officials decided that central banks would have a prominent place in the new international monetary system. Therefore, countries that still did not have such institutions were encouraged to create them. According to the Brussels consensus, the new central banks had to be independent of any political pressure.

The emphasis on promoting the creation of central banks was a consequence of a fundamental concern industrial countries had during the postwar period: the management of increasingly scarce gold reserves. In a world that was just starting to recover from the effects of the First World War, the global restoration of the gold standard required a substantial increase in existing gold reserves. Indeed, if the gold standard was to be re-

established, there had to be sufficient gold to provide the necessary liquidity to accompany the expansion of world trade (Eichengreen 2019). However, between 1919 and 1925, the world gold reserves were growing slower than needed. In this context, discussions about how to manage existing gold reserves became central. In the Brussels conference, two solutions were proposed. First, to create central banks that would monopolize and administer gold reserves. Second, to adopt a gold-exchange monetary standard. This meant that currencies would be backed by a combination of gold and foreign currency (preferably pounds sterling).[17] These debates were the first signs that the value regime of capitalist currencies had started to suffer deep transformations. A second important monetary event followed the Brussels conference: the Genoa conference of 1922. During this conference, industrial countries insisted that governments from all over the world (but especially those of peripheral countries) had to implement an *exchange-gold standard*. As noted, this was a monetary standard in which central banks were allowed (and encouraged to) maintain part of their foreign reserves in pounds sterling (or eventually dollars). Meanwhile, the plan was to concentrate gold reserves in the central banks of the industrial countries. The League of Nations (the historical predecessor of the United Nations) played a central role in this attempt to restore the international order. The league actively encouraged member states to return to the gold standard and to simultaneously adopt a system of mixed reserves (Redish 1993). However, the conclusions reached at the Brussels and Genoa conferences soon proved too simplistic for the 1920s and 1930s' monetary reality.

The world of the early 20th century was, for several reasons, a world in transition. On the one hand, it was a world in which European nations needed to rebuilt themselves almost entirely. After the war, European countries were devastated. Their economies were bankrupt. In the context of rising inflation and massive unemployment, the use of monetary policy for domestic purposes soon became more important than the sole objective of exchange rate stability (which had been the hallmark of the previous era). In these new circumstances, the return to an international standard of fixed exchange rates soon proved unrealistic (Eichengreen 2019). To complicate matters further, the

[17] The preference for the British pound as the preferred currency is not coincidental. Many of the conclusions reached at the Brussels (1920), and Genoa (1922) conferences reflected British interest. To a large extent, this had to do with Britain's ability to exert global influence in a context where the United States, its main competitor, opted for isolation. In fact, the United States refused to join the League of Nations and attended these international monetary conferences only as an observer. On this topic see Eichengreen (2011; 019).

international political scene was shifting towards a new equilibrium by the end of the war. The center of gravity of the international monetary system was moving from the United Kingdom to the United States. Before the First World War, England had been the world's most important economy, and the pound sterling had been at the apex of the international hierarchy of currencies. However, during the interwar period, the United States was disputing England's economic power. As the United States consolidated itself as the new global hegemonic power (both commercial and financial), the pound sterling started to give up its privileges as the global reserve currency. With time, this position was occupied by the US dollar (Eichengreen 2011). However, far from being a passive transformation, this transition was an active political race, in which both countries tried to preserve their respective areas of influence. In the US, the government sought to promote the national commercial and monetary interests by implementing a new foreign policy: the 'Dollar diplomacy' (Rosenberg 2003). The United Kingdom also implemented a series of measures to preserve and strengthen the country's area of influence. As part of them, it created the Commonwealth, a preferential area for buying and selling products with its former colonies (Australia, New Zealand, and Canada). The objective was to secure a commercial area for the pound sterling.

Still, despite their clashing interests, by 1930, England and the United States shared the ambition of restoring the gold standard. However, regardless of their joint efforts, attempts to re-establish the old monetary order ultimately failed. As Barry Eichengreen (2008, 44) notes, the "lesson drawn was the futility of attempting to turn the clock back". From 1929 onwards, the uncontrollable leakage of gold led different countries to suspend convertibility gradually. The United Kingdom suspended gold-convertibility in September 1931. On the other hand, the French government managed to sustain the parity for a few more years but ended up suspending gold convertibility in September 1936. Even if the US dollar was the only currency that continued being convertible into gold, it still received some shocks. For example, in April 1933, President Roosevelt decided to modify the parity between the dollar and gold. The change shook the foundations of the world's monetary system (Richardson, Komai, and Gou 2018).

Overall, during the 1920s and the 1930s, the international monetary landscape was complex and unstable. The gold standard had proved impossible to restore. Furthermore, in a context in which there was no longer a metallic anchor to which to tie the values of

the national currencies, volatility increased dramatically. As exchange rates were continually changing, policymakers worldwide tried to find strategies to stabilize the prices of their national currencies. But in a world where gold was no longer money's measure of value, policymakers were increasingly lost. Still, the solution only appeared some years later during the Bretton Woods agreements of 1944, when countries found a new anchor to tie money's value: the US dollar. All in all, between 1929 and 1944, capitalist currencies' value regime underwent its second significant transformation. With the breakdown of the gold standard in 1936, the qualitative differences between national currencies became more evident. In a context in which global trade based on gold was no longer possible, countries needed to access different currencies, depending on who their trading partners were. By 1932, due to the monetary transformations that occurred during the beginning of the 20th century, the world was divided into three monetary blocks. First, a block of countries led by the United States that still adhered to the gold standard. Second, the pound sterling area, which included the United Kingdom and many of its former colonies. And third, the countries of central and eastern Europe, led by Germany, where exchange controls prevailed. Only a few countries (such as Canada and Japan) were outside these three blocks (Eichengreen 2008, 49).

The Bretton Woods agreements and the US dollar supremacy (1936-1960)

In 1936, when France announced the suspension of gold-convertibility, the world was still trying to rebuild the international monetary system. At that time, there were two significant concerns: how to control the chaos prevailing in the international payment system and how to curb the sharp exchange rate movements. In September 1931, the United Kingdom had declared the suspension of gold convertibility. As a consequence, many countries imposed foreign exchange controls and established protectionist measures. This caused a series of competitive devaluations and unleashed international monetary chaos. The existing problems threatened to annihilate multilateralism (Ocampo 2016). In September 1936, after the French government announced a devaluation of the franc, the three dominant economic powers of the time (the United States, the United Kingdom, and France) made the first attempt to restore the lost order. The three countries signed an agreement and committed to sustaining their exchange rate values constant. They also promised to cooperate to maintain an orderly evolution of their currencies'

value and avoid a new wave of competitive devaluations. Moreover, they agreed to exchange gold at a pre-established price. This way, a new international monetary system was put in place, which established the three currencies would be used for international trade. Unfortunately, the beginning of the Second World War put an end to this arrangement (Aglietta and Coudert 2015, 39).

Renegotiations to rebuild the international monetary order had to wait until 1941. At that time, the United Kingdom and the United States governments requested their respective advisers, John Maynard Keynes and Harry Dexter White, to prepare, each one separately, a strategy to rebuild international trade. The negotiations that would later lead to the Bretton Woods agreements of 1944 were initiated based on these two reports. While both proposals were rivals on several points, they also reflected a certain degree of consensus, especially regarding three problems. First, both Keynes and White agreed that the gold standard's failure had one main reason: the impossibility of the system to cope with the main postwar economic problem, namely, rising unemployment. In this regard, both officials highlighted the need for an international monetary system that would allow greater flexibility in the management of domestic economic policy. Thus, in the new international monetary system, countries should be able to implement anti-cyclical policies during times of crisis. A second common goal was to put an end to the sharp exchange rate movements that were occurring at the time. Finally, both advisors agreed that capital flows needed to be regulated, so that global financial stability could be guaranteed (Ocampo 2016).

However, beyond these common points, there were also significant disagreements between both proposals, especially regarding the design of the global reserve system. Keynes' project proposed an international monetary system that abolished foreign currency markets and instituted a single world reserve currency. Also, Keynes proposed creating a central bank of central banks (the International Clearing Union). This institution would be responsible for issuing the world reserve currency, which could not be appropriated by private agents or specific countries. The project also contemplated mechanisms to provide liquidity to countries that needed to adjust their trade balances. Keynes argued that both countries with trade deficits and those with trade surpluses had to share the adjustment burden. So, countries with surpluses would be forced to finance countries with deficits and help them to correct trade imbalances. But in the world of the

second postwar period, the Keynesian solution meant that the United States (which was the country with the highest world surplus) would have to become the main financier. This proposal was unacceptable to the host of the Bretton Woods negotiations (Ocampo 2016, 4). The project of the American Harry Dexter White, on the other hand, proposed to restore convertibility between national currencies. Specifically, White recommended that countries should establish a system of fixed but adjustable exchange rates. This would help to avoid competitive devaluations. White's project also proposed the creation of two international institutions: a foreign exchange stabilization fund (the International Monetary Fund) and an international reconstruction bank (the World Bank). Both institutions would be responsible for providing the necessary capital in cases where private financing was scarce.

The discussions between the United States and the United Kingdom lasted almost two years. Finally, on October 8, 1943, the two countries reached an agreement. Both countries then wrote a joint Anglo-American proposal, which should serve as a basis for a global conference. However, other countries also showed an interest in participating in the monetary reform when the text was published. A joint global proposal on how to reformulate the international monetary system was only published on April 22, 1944. The proposal included a set of common principles that were to be discussed at an international conference held in Bretton Woods. The conference started on July 1, 1944, and lasted three weeks (Aglietta and Coudert 2015, 45). What happened next is known history. As a result of the negotiations, a series of measures were adopted, many of which reflected the US interests. Countries agreed to adopt a system of fixed but adjustable exchange rates. Each country had to establish an exchange rate parity set in gold or a gold-convertible currency. In principle, the exchange rate had to be fixed, but it could eventually be adjusted to correct 'a fundamental imbalance' (Ocampo 2016, 3). Besides, countries were allowed to implement controls to limit international capital flows. Also, two new international monetary institutions were created. The International Monetary Fund would be in charge of monitoring national economic policies and extending financing to countries that suffered trade deficits. The World Bank, on the other hand, would have the mission of financing the reconstruction of countries devastated by the Second World War. As for the problem of how to deal with the global gold shortage and guaranteeing global liquidity, it is a well-known fact that the Bretton Woods agreements

placed the US currency at the heart of the international monetary system. However, the negotiations that led to this outcome were less linear than is usually acknowledged.

By 1944, already for several years, the international monetary system's architects had been considering how to expand international reserves. But in a reserve system exclusively based on gold, this was very hard to achieve. Thus, policymakers started to consider allowing central banks to complement their gold reserves with foreign currency. As a matter of fact, complementing gold reserves with foreign currency was already a usual practice since, at least, the beginning of the 19th century. For example, in 1913, foreign currency reserves represented 20% of the total global reserves, against 80% of reserves in gold and silver. In the 1920s, the proportion of foreign currency reserves rose rapidly, reaching 28% in 1925. In 1948, this proportion rose even more, up to 42%. Until the beginning of the 1940s, both the US dollar and the pound sterling were used as reserve currencies. In fact, in 1941, the pound sterling guaranteed 57% of total international foreign exchange reserves (Aglietta and Coudert 2015, 32). But in 1944, the situation of the pound sterling had changed. In fact, for the officials who participated in the Bretton Woods conference, it was already evident that the US dollar was the only currency that could be placed at the center of the international monetary system. As much as they had wished a different scenario, everyone knew that the pound sterling would hardly ever recover the central role it had had in the past. The end of the Second World War had found the British economy weakened, with enormous debts and obligations contracted with other countries and no real capacity to pay. England's last attempt to foster the pound sterling role as a world reserve currency took place in July 1947, when the British government tried to re-establish gold convertibility. However, the rapid reduction of the country's gold reserves forced the British government to suspend the parity again only a month later. The event demonstrated the British weakness. Meanwhile, the United States' intention to raise the dollar to the international reserve currency status was evident. However, the US government knew that this goal was only possible if the country assumed the commitment to convert US dollars into gold. However, even for the country that monopolized three-quarters of the world's gold reserves by the end of the Second World War, this commitment was difficult to face (Ocampo 2016).

The officials at Bretton Woods agreed on a peculiar solution. Since January 1934, the United States government agreed to sustain the gold convertibility of the US dollar.

However, the Federal Reserve was only obliged to convert into gold other central bank's dollar reserves, at the established price of 35 dollars per ounce of gold (Richardson, Komai, and Gou 2018). Meanwhile, as established by Roosevelt in 1933, the rest of the dollars in circulation continued to be inconvertible. Moreover, the Bretton Woods agreements forced all other countries to set their exchange rate parities either in gold or in a currency convertible into gold. However, since most countries were devoid of gold, they set their exchange rate values in dollars. Since then, all world nations considered the dollar as reliable as gold. The trust in the dollar's value was reflected in the composition of central banks' reserves (Aglietta and Coudert 2015). This way, the US dollar became the international unit of account. Thus, since 1944, the US currency has been used to set prices in the world market, negotiate transactions, and grant credits to countries and companies.

An important point to notice is that, since the dollar became the world's official reserve currency, the asymmetries of the international monetary system increased even further. Even if, at first, there was a general presumption that the monetary system would become more harmonious over time, this did not occur. On the one hand, the international monetary system's architectural design, which was already hierarchical, prevented any search from symmetry. However, there was a second reason why the system became even more hierarchical than before. During the time gold was the international reserve currency, there were, in principle, no obvious beneficiaries in the system. That is to say, while gold was the primary reserve asset, the most powerful country was the one who could appropriate the larger quantity of gold. In principle, this place could be occupied by any country as long as its central bank managed to hoard sufficient gold (Kaltenbrunner and Painceira 2018). However, in the post Bretton Woods era, the situation changed. To the extent that the global reserve currency is the currency of one specific country, there is indeed one primary beneficiary of the system. Moreover, since the only institution capable of issuing the global currency is the Federal Reserve, there is no possible way to challenge US supremacy, except for challenging the whole system. This architecture has considerable implications and increases the hierarchical nature of the global monetary system.

The American victory, consolidated both in the battlefields and in the field of industrial development, was also reflected in the supremacy of the US currency in international

monetary relations. However, in contrast to the initial predictions, the disappearance and replacement of the pound sterling as the second international reserve currency was a process that happened gradually. Even if at the beginning of the Second World War, the global proportion of reserves in pounds sterling (which until then amounted to more than 50%) fell sharply; by 1960, this proportion still amounted to 30% of global foreign exchange reserves. Until the late 1960s, a significant part of world trade continued to take place in pounds sterling (Schenk 2010). Meanwhile, in a context where the pound sterling role was declining, and the global supply of gold was rigid, the United States was forced to provide the liquidity to sustain world trade. Even though, in theory, the US had the option of ignoring foreign governments' wishes and limiting the number of dollars issued by the Federal Reserve, the country chose to flood the international system with dollars. Logically, the increasing quantity of dollars led to an equally increasing deficit in the US trade balance (Ocampo 2016).

All in all, the crisis of the gold standard was solved in 1944. Due to the decision, sealed at Bretton Woods, to raise the US dollar to the status of the global reserve currency, the world found a new anchor to tie trust in money's value. Until 1944, trust in capitalist currencies had been grounded in money's gold convertibility. However, in that year, the value regime that sustained trust in money changed. After Bretton Woods, trust in capitalist currencies started to be tied to the US government's ability to keep the promise of converting its currency into gold at the price of 35 dollars per ounce. With this transformation, the link between most capitalists' currencies and gold became even more distant. Also, the dependence on the US dollar increased the infrastructural instability of the system. By the end of the 1950s, however, as the number of dollars in circulation in the world increased at a dizzying rate and, consequently, so did the US trade deficit, doubts about the US government's real capacity to keep the promise in the value of its currency deepened. During the 1950s and 1960s, the increasing deficit of the United States' trade balance became the privileged barometer of global trust in money's enduring value. As I will show in the following, in the early 1970s, the deepening of the international monetary system's inherent design problems led the Bretton Woods arrangement to finally collapse. The lack of agreement on how to design an alternative system led to the emergence of a 'non-system' of fiat currencies that has survived until the present. In this 'non-system', the US dollar (now fiat) has retained its exorbitant

privilege as the dominant global reserve currency. How long this privilege may last is something only time will tell.

The fall of the Bretton Woods international monetary system (1960-1973)

The Bretton Woods international monetary system had two fundamental problems that stemmed from its architectural design. The first one was related to the use of a national currency as the world's reserve currency. The second was the absence of mechanisms that could help to balance trade imbalances between different countries of the world. Both issues were related.

Since 1944 the dollar had become the world's trade currency. This situation was not surprising given the United States' dominant position in both international trade and finances and its abundant gold reserves. However, the fact that the global reserve currency was the currency of a specific country created irresoluble contradictions. On the one hand, the international monetary system had increasing liquidity needs. In fact, in a world where world trade was booming, global liquidity needs were increasing. The increasing demand for dollars was not only caused by the fact that world trade was carried on in that currency. Since governments and central banks were trying to supplement their gold reserves with dollars, the global shortage of gold also caused pressure on the dollar supply. Thus, more and more dollars were needed. However, the main problem was that to feed the growing global dollar demand, the United States had to increase its spending. This was the US 'exorbitant privilege' (Eichengreen 2011): it was the only country capable of running a trade deficit for years without either generating significant imbalances in its domestic economy or facing fierce disciplinary responses from international financial markets (Kaltenbrunner and Painceira 2018).[18] Moreover, the US external deficit could be as large as the ambition for dollars of private agents and central banks worldwide. However, the system had a severe contradiction. This contradiction was that the sustained increase in the number of dollars in circulation (which had been issued to satisfy the growing global demand), put at risk the US capacity to deliver an ounce of gold in exchange for 35

[18] As Kaltenbrunner and Painceira (2018, 42) point out, as the currency at the top of the international currency hierarchy, the dollar can defer external adjustment and allow external imbalances that elsewhere would trigger a fulminant disciplinary response from international financial markets.

dollars, as the Federal Reserve had committed to do in the Bretton Woods agreements. The increase in global liquidity implied a potential loss of credibility in the promise of the Federal Reserve to convert US dollars into gold at the agreed price. But if during the 1950s and 1960s the world wanted dollars, it was because the dollar was, at that time, the only currency still convertible into gold and, therefore, the most trustworthy on the globe. However, once the external US trade deficit grew faster than the country's gold reserves, the credibility in the dollar's enduring value was meant to collapse.

The first economist to notice this contradiction was the Belgian economist Robert Triffin. This is why this problem is known today in specialized literature as *Triffin's dilemma*. Indeed, as Triffin had anticipated in 1947, in 1960, the growing US trade deficit began to threaten the Bretton Woods international monetary system's survival. During the 1940s and 1950s, the US balance of payments had recorded constant annual surpluses. However, by the late 1950s, the situation changed, and the strong current account surpluses that had characterized the post-war years weakened. In the second half of the 1960s, and for the first time, the United States' external deficit exceeded its gold reserves. The main reason behind the imbalance between the US gold reserves and the number of dollars in circulation was that money issuance was growing faster than gold mining. But there was a second cause behind the increasing gap. That is that the United States was no longer the country to which new gold extractions were flowing. In fact, since the 1960s, newly-minted gold was concentrated in European countries. The big winner was Germany, which by 1957 had overtaken Switzerland and would soon overtake the United Kingdom as the second largest gold reserve holder in the non-communist world (Ocampo 2016). This meant that the United States' gold holdings, which by the end of the Second World War had accounted for three-quarters of the world's gold reserves (excluding the communist countries), were reduced to about half by the end of the 1950s.

The delicate circumstances made it increasingly clear that if foreign central banks tried to convert their dollar reserves into gold, their actions could have the same effect as a group of depositors lining up outside a bank. Sooner than later, other countries would join in for fear of being denied access to gold. As countries would rush to convert their dollars, the US would be forced to suspend gold convertibility or devalue its currency, or both. By 1960, the pressure on the dollar was huge and growing. Logically, the United States was more than interested in preventing the loss of its gold reserves. But other countries also

had a collective interest in the stability of the dollar. Indeed, a devaluation of the dollar would mean an inevitable loss of the value of other countries' own dollar reserves. So, for a while, the governments and central banks of several industrial countries agreed to collaborate with the United States and support the dollar, precisely because it was the backbone of the Bretton Woods system.

Between the 1960s and the 1970s, as a result of the common interest in supporting the exchange rate between gold and the dollar established at Bretton Woods, industrial countries implemented several actions. One of these actions was to create a *Gold Fund* in 1961. The fund consisted of eight industrial countries' central banks: Belgium, France, Germany, Italy, the Netherlands, Switzerland, the United Kingdom, and the United States. Its goal was to fix the price of gold and share responsibility for stabilizing the market. Besides, industrial countries also increased their central banks' dollar reserves and committed not to exchange them for gold. All these actions were aimed at preventing a devaluation of the US currency. The US government, in turn, imposed capital controls to contain international pressures. These mechanisms worked relatively well between 1962 and 1965. But from 1966 onwards, the doubts about the sustainability of the gold-dollar parity started to grow again. Global distress regarding the value of the US dollar had its reasons. Although the Kennedy and the Johnson administrations recognized the seriousness of the situation, truth is they were not willing to address the causes behind it. The main problem was that the United States was running an expansionary monetary policy intended to finance the Vietnam War. Thus, as the government increased the country's fiscal deficit, fears of inflation were rising. The US government, however, was unwilling to consider a change in its domestic economic policy. But this attitude jeopardized the sustainability of the international monetary system. Logically, the other industrial countries' governments and central banks were unwilling to keep collaborating with the United States without limit. Even if, at the time, no one looked favorably on the potential breakdown of the Bretton Woods system, the truth is that the measures needed to support it were becoming increasingly harder to accept.

The first impact on the Bretton Woods system occurred during the spring of 1971 when a massive volume of capital fled from the dollar into the German mark. Germany, fearing inflation, stopped monetary intervention and allowed the Deutsche mark to fluctuate upwards. The Netherlands joined in, and other currencies followed. The flight from the

dollar, once started, was not easy to stop. During the second week of August, the financial press reported that France and Great Britain were planning to convert their dollar reserves into gold. As a response, on the weekend of August 13, the Nixon administration closed the gold window and suspended the US commitment to convert gold at the official price of 35 dollars an ounce (or at any other price). Instead of consulting, Nixon's administration simply reported its decision to the International Monetary Fund. Over the next four months, industrial countries held extensive negotiations that sought to reach a consensus on reforming the international monetary system. These negotiations culminated in an agreement signed at a conference on December 18-19, 1971, at the Smithsonian Institution in Washington. In the Smithsonian Agreement, industrial countries agreed that the US dollar would be devalued by only 8% and that floatation bands would widen between the different currencies. But the United States was not forced to reopen the gold window, as long as it complied with the agreement to keep exchange rates within the established parities.

However, nothing fundamental had changed. Triffin's dilemma had not been resolved, and the US economic policy remained too expansionary to be compatible with a system of fixed exchange rates between the dollar and other currencies. Moreover, since the US government had already devalued the dollar once, there was no reason to doubt it could do it again. In early 1973 the Bretton Woods system finally collapsed. A new run against the dollar led Switzerland and other countries to let their currencies fluctuate freely. Although European countries negotiated a second devaluation of the dollar, the underlying imbalances remained, and there was no guarantee the system of fixed exchange rates would last. When the flight from the dollar resumed later in 1973, Germany and its partners in the European Economic Community jointly decided to let their currencies fluctuate upwards. This decision finally broke the Smithsonian pact, and the Bretton Woods international monetary system ceased to exist.

The international monetary system after Bretton Woods (1973-2020)

"The transition to floating following the breakdown of Bretton Woods was a leap in the dark" (Eichengreen 2008, 136). Until then, the exchange rate's stability had been the paramount goal to which monetary policy was directed. Except during exceptional times,

monetary policy had mostly been an instrument used to peg the exchange rate. However, in 1973 policy was cut loose from these moorings, and exchange rates were allowed to float. In the new situation, currencies lost all connection to the material world. Without a clear anchor to which to tie trust in money, policymakers found themselves with no firm footholds in the new monetary world. As anxiety grew, so did the fears that the global economy would enter a phase of monetary upheaval and financial instability. Still, there were a few who argued that the disappearance of a system of fixed exchange rates would allow currencies to float towards their equilibrium position. This movement would eliminate misalignments between currencies. Today we know both predictions were wrong. Indeed, after the breakdown of Bretton Woods, nominal and real exchange rates became more unstable than they were before. Thus, exchange-rate volatility increased. Moreover, on many occasions, changes in money's prices were not driven by economic fundamentals but by speculation (Rose 1994). However, the financial chaos predicted by those who opposed floating exchange rates did not occur.

The US abandonment of gold-convertibility resulted in two parallel attempts to reform the international monetary system. The first was the attempt to reconstruct a system of exchange rate parities among major currencies. The second was comprehensive negotiations to design a new international monetary system. The first took place in the context of the Group of Ten (G-10) and the second of the IMF, in the Committee of Twenty (C-20) that was created for that purpose (Ocampo 2016). Both attempts failed. The result was a de facto transition to what can be adequately characterized as an 'ad hoc non-system' (Williamson 1977, xiii). In Williamson's word: "what emerged after the C-20 cannot be described as an international monetary 'system', in so far as the word system implies a well-defined set of rights and obligations. [In the current arrangement, however,] countries are free to do in large measure as they please" (Williamson 1977, 74-75). With a similar argument, Eichengreen has pointed out that even if it is true that the Bretton Woods international monetary system was hardly fully coherent, the ad hoc non-system that emerged later is even further away from any coherent design (Eichengreen 2019). The two most salient features of this ad hoc non-system are: (a) a global reserve system mainly based on an inconvertible (fiat) dollar - a *fiduciary dollar standard* -, but open in principle to competitive reserve currencies; and (b) freedom for each country to choose the convenient exchange rate regime, as long as they avoid 'manipulating' their exchange rates, a term that has never been clearly defined (Ocampo 2016, 21). After 1973,

two main changes took place: capital mobility and monetary instability increased sharply, and more and more countries tended to adopt floating exchange rates. The US dollar, on the other hand, continued to be the global reserve currency.

After the breakdown of Bretton Woods, the difficult economic circumstances of the 1970s decreased, even more, the likelihood of re-establishing a coherent international monetary system. In August 1973, only two months after Nixon had closed the gold window, the world faced one of the most important economic challenges of the 20th century: the oil crisis. When the member countries of the Organization of the Petroleum Exporting Countries (OPEC) resolved to stop supplying oil to the western nations that had supported Israel in the Yom Kippur War, oil prices skyrocketed. By December 1973, oil prices had quadrupled. The increase caused a sharp rise in the global inflation rate and led to an international crisis. A drop in economic activity of a magnitude not seen since the Second World War was followed by a massive rise in unemployment. The oil crisis marked the end of the post-war golden age and the beginning of a period of slower global growth and higher inflation rates that came to be known as *stagflation*.

Due to the joint effects of the oil crisis and the collapse of the Bretton Woods international monetary system, the 1970s was a period of high instability and turmoil in global financial markets. Initially, the Europeans and the Japanese were confident that, sooner than later, it would be possible to go back to a system of fixed exchange rates. The United States, however, had soon moved from the restoration of adjustable pegs to advocacy for floating. Officials - especially those of organizations like the International Monetary Fund that were heavily committed to the old system - did not jump willingly to the new reality; they had to be pushed (Eichengreen 2008). Over the years, however, the tendency towards floating exchange rate regimes deepened. Still, during the 1970s, exchange rate volatility was lower than it would be later on. Two main reasons explain this reality. The first is that governments actively intervened in foreign currency markets during the years that followed the collapse of the Bretton Woods system. The Canadian dollar, the French franc, the Swiss franc, the lira, the yen, and the pound sterling were all actively managed (Ocampo 2016). The second is that, at that time, countries were still willing to adjust their monetary and fiscal policies to meet a specific exchange rate target.

However, from the mid-1970s onwards, flexible exchange rates started to become more and more common.[19] One of the main reasons behind this trend was the dramatic increase in capital mobility. Naturally, this was not a new phenomenon. Already since the late 1950s, the recovering of world trade and the development of the euro-dollar market in London had contributed to increasing capital flows. But in the 1970s, there was a big leap in capital mobility. In 1974, a notable trend towards market liberalization started in the US and spread to the rest of the developed world (Krippner 2011). Increasing capital movements also increased currency volatility. And increasing volatility went hand in hand with floating exchange rates. In fact, given that increasing capital mobility reduced the effectiveness of capital account regulations, it also threatened the stability of fixed exchange rate regimes. With no real possibility to implement effective capital controls, countries started to adopt floating exchange rates, only because this was one of the few solutions they could put in place to protect themselves from currency speculation. So, from the 1970s onwards, global financial markets had to get used to large capital masses, which moved without limits in the search for better profit opportunities. In the new context, the old *trilemma* described by Mundell and Fleming in the early 1960s became a *dilemma*.[20] Deprived of the option of stopping transnational capital movements, countries could only choose between having a fixed exchange rate or an independent monetary policy. In this context, it is not surprising that governments gradually embraced more and more flexible exchange rates. In fact, as Barry Eichengreen (2019, 175) noticed, since 1973, the evolution of exchange rate regimes shows a significant decline in the percentage

[19] One necessary clarification is that, while there is an agreement that, since the mid-1970s, an increasing number of countries adopted floating exchange rate regimes, there is no clear definition of what does it mean to float. Rose (2011) noted that, while a fixed exchange rate regime with capital mobility is a well-defined monetary regime, floating is not. If the central bank does not fix the exchange rate, it has to do something else, but what? There is a consensus among economists on what the central bank does in a fixed exchange rate regime. However, there is no clear consensus regarding floating exchange rate regimes, except that central banks do not explicitly maintain a specific (and publicly known) exchange rate value. Thus, in a floating exchange rate regime, the central bank retains the discretion to decide at what value to stabilize its currency (Klein and Shambaugh 2010). Some countries that float maintain an inflation-targeting monetary policy framework (i.e., New Zealand, Sweden, and Chile). However, not all of them do that. For some countries, monetary policy's objective is the growth of monetary aggregates (i.e., Nigeria). Others have a somewhat opaque monetary policy. In these circumstances, scholars have noted it is not reasonable to group all non-fixers under one single floating regime category. Some economists' response to this dilemma has been to point out that the academic profession should stop trying to classify countries according to their exchange rate regimes. Instead, they should start classifying countries according to their monetary policy frameworks (Rose 2011). An example of this position would be group countries whose central banks follow an inflation-targeting policy into a single category. The list is surprisingly consistent with countries that float their currencies. Still, it provides a better criterion for grouping and avoids distinguishing between empirically and theoretically confusing categories, such as 'pure floating', 'dirty floating', and 'managed floating'. However, other economists have not lost hope of classifying exchange rate regimes into different categories that retain some explanatory power.

[20] On the Mundell and Fleming monetary trilemma see footnote 11 in the previous chapter.

of operating soft pegs (from 57% to 46%) and corresponding increases in the percentage of countries with hard pegs (including monetary unions) and floats. Of course, it was mainly Europe's advanced countries that moved to hard pegs and mostly emerging markets that moved to floating regimes.

A second important process contributed to transforming the monetary landscape during the 1980s and played a key role in consolidating floating exchange rate regimes, namely, the United States' decided to place inflation control at the top of its policy agenda. After Paul Volcker was named its chairman in 1979, the decisions taken by the Federal Reserve made it evident that the world was becoming increasingly dependent on the US monetary policy. Doubts about the US economic priorities were dispelled by the appointment of Paul Volker. Volker was willing to raise interest rates and tighten monetary policy as much as needed to bring down US inflation, which was in double digits. Thus, from 1979 onwards, the Federal Reserve implemented a strongly contractionary monetary policy that resulted in a significant rise in interest rates. Volker's policy caused massive capital inflows and led to an appreciation of the dollar. Moreover, the policy also made it dramatically clear how dependent the world had become on the US monetary policy decisions. In fact, during the 1980s, Paul Volker managed to tame US inflation. However, his policies had enormous global consequences. The sharp rise in US national interest rates led to a slowdown in global growth. Moreover, it increased financial fragility and caused one of the most significant crises of the 20th century, the Latin American debt crisis, which led to Latin America's 'lost decade' (Ocampo et al. 2014). In this regard, one of the most important lessons of the 1980s was that, as long as the dollar remained the preferred global reserve currency, the world would have to withstand the pro-cyclical capital movements that followed the Federal Reserve's decisions.

During the 1990s, the trend towards floating exchange rate regimes strengthen further. After the collapse of the Bretton Woods international monetary system, as money's value became increasingly self-referential, currency speculation increased sharply (Krugman 2000). Since money's value was no longer tied to any material asset, it became more and more dependent on market movements. In these circumstances, investors quickly realized that challenging currencies' values could be a profitable business and started to test these values in the search for profits. The combination of floating exchange rates, lower central bank intervention levels, and increasing speculation was explosive and led to a period of

tremendous instability in global financial markets. The problem started in 1992 and 1993 when a series of currency crises hit Europe's developed economies. Between 1994 and 2001, currency crises spread all over the world. Starting in Mexico in 1994, they reached Asia's economies in 1997. Only a few years later, currency crashes extended to other developing economies, such as Russia, Brazil, and Argentina.

As the Asian crises of 1997, clearly showed, in the post-Bretton Woods monetary world, currency attacks could succeed even in those cases where exchange rates were macroeconomically sustainable (García and Olivié 2000). Thus, floating exchange rates seemed to be the only refugee governments had left. Naturally, over the years, more and more countries started to abandon fixed exchange rate regimes and move towards floating ones. Gradually, central bankers and monetary policymakers got used to floating exchange rates' dynamics, and global fears of monetary chaos were slowly dispelled. The conclusion is that a decade after the breakdown of Bretton Woods, many countries had followed the US and adopted a flexible exchange rate policy. The most notable example of this trend was Japan. Until the 1970s, Japan had always maintained a fixed exchange rate. Indeed, during the 1970s, Japan tried to keep its exchange rate stable and intervened heavily in the foreign exchange market. However, after the second oil shock, in 1979, the country's monetary authorities implemented an increasingly flexible exchange rate policy. On the other hand, the share of emerging countries adopting floating exchange rate regimes increased from 13% to 47%. Examples of this trend include Brazil, Chile, Colombia, India, Mexico, South Korea, Thailand, Russia, Poland, and Turkey (Eichengreen 2019).

The two big exceptions to the trend towards floating exchange rate regimes were Europe and China. For historical reasons, European countries had more faith in intervention and cooperation and opted for a monetary regime of fixed exchange rates between the countries of the European Community. Over time, this system led to creating a monetary union governed by a regional central bank (the European Central Bank), which issues a common currency (the euro). However, it must be noticed that, as in the case of the yen and the US dollar, exchange rate movements between the euro and the other currencies float freely. Thus, the great exception to the tendency towards increasing floatation has been China. For some scholars, such as Barry Eichengreen (2019, 178), "China did not face the same pressure as other countries to increase exchange rate flexibility. Since it

still had capital controls, it had some scope for running an independent monetary policy. Because it was not a democracy, political pressure to orient monetary policy toward targets other than the exchange rate was also less intense". In this view, China's secret has been that the country managed to avoid Mundel's dilemma due to the combination of underdeveloped financial markets and a politically authoritarian regime. These two facts allowed China to control capital movements much better than other countries.

After the Bretton Woods monetary system's fall, the US (now fiat) dollar continued to be the global reserve currency. Even if, for several decades, economists had foretold that the US currency would lose its dominant position, the truth is that, after 1973, the supremacy of the US dollar strengthened even further. Several factors explain this outcome. Undoubtedly, the international monetary system's history was crucial in consolidating the increasing prominence of the dollar. As I showed, the dollar became the world's reserve currency to no small extent because the United States emerged from the Second World War in a better position than all other countries. It was the country with the highest gold reserves and the only one that could sustain convertibility. What other countries did was also decisive for the dollar supremacy. Britain's economy was devastated and in debt after the war. Therefore, the country was incapable of sustaining the pound sterling's role as the world's reserve currency. Germany and Japan, for their part, chose to restrict the internationalization of their currencies. The consequence of all these actions was that the dollar found itself without competition (Eichengreen 2019, 215). Moreover, the fact that the dollar remained the dominant currency in international transactions since 1944 allowed the US currency to consolidate itself financially, thus today, several other structural economic reasons reinforce its supremacy.

The first structural economic reason that reinforces contemporary dollar supremacy is that, like all social institutions, the international monetary system has inertia. In a world where all currencies are fiat, there would be no reason, in principle, to choose one currency over another. Prices are already denominated in dollars, and the world is already used to making transactions in dollars. So, if there are enough dollars to make these transactions, why to change the situation? The second reason is that the dollar has 'structural power' (Strange 1971). That means that, because the US is already dominant, it can exercise its power, which, in turn, helps it to increase its power even more. An example of this structural power is that the US has always had the capacity to orient

negotiations on the international monetary system's potential reforms towards its interests. Another example is that, in a world where everyone has dollars, there is a collective interest in preserving both the value and the importance of the dollar for international trade. However, the most crucial reason behind dollar supremacy is that, because the dollar is the currency at the apex of the international currency hierarchy, it has a built-in tendency to strengthen, even when the global economy experiences a crisis. In fact, in a world of fiat currencies where a currency's most essential property is its liquidity, the United States is the country with the deepest and most liquid financial markets in the world. In this context, the power of the dollar is self-reinforcing. Why is this? Precisely, because the dollar has a status as a safe haven, and that means it can stabilize itself in times of crisis, increasing its power even further. Today, the US treasury securities market is the largest, most liquid financial market in the world. Because US treasuries are so widely held, anxious investors can buy and sell them without moving prices. In turbulent times, when speed and flexibility are essential, and when there is nothing investors value more than liquidity, the US treasury securities market's liquidity allows them to keep their options open. Thus, during crises, when financial survival may require investors to move quickly in or out of other assets and currencies, capital flows towards the US stabilizing its financial markets, precisely when those markets come under strain. This tendency of the dollar to stabilize itself during crises is evident even when America itself is the epicenter of the crisis, as it was in 2008. This is America's 'exorbitant privilege' as the issuer of the leading *safe-haven currency*. The international architecture of money, increasingly hierarchical, in which the US dollar is located at the apex, has enormous consequences for the global economy. Several works have described the advantages the US dollar dominance brings to the United States (Agnew 2010; Cohen 2017; Eichengreen 2011; 2019; Kaltenbrunner and Painceira 2018; Kirshner 2008; 2003; Mehrling 2012; Oatley 2014; Ocampo 2016). However, there are still very few studies that focus on what are the problems suffered by the countries located at the bottom of the international currency hierarchy and on how monetary dependence is reproduced.

The monetary reality in Latin America after Bretton Woods (1973-2020)

In much of the industrialized world, then, the post-Bretton Woods period was marked by a movement towards more flexible exchange rates. Large countries, like the United States, Japan and Canada, for whom the importance of international transactions was still limited, opted to float. For them, the uncertainties of a fluctuating exchange rate, while not pleasant, were tolerable. The same trend was evident in the developing world, although it was slower in coming. Like in the industrial world, in developing countries, this transition was a consequence of the rise of international capital mobility. However, for smaller, more open economies, especially countries with thin financial markets, floating exchange rates were even more volatile and disruptive. In such circumstances, for much of the 1970s and 1980s, the vast majority of developing countries (including the Latin American countries) opted for a different alternative: attempting to establish a fixed currency peg. Thus, during the 1980s, most Latin American countries implemented fixed exchange rate regimes (Eichengreen 2008, 135).

During the 1980s, most countries in the Latin American region chose to tie their currencies to the US dollar. The policy was reasonable in light of the region's monetary history. Since the mid-1940s, most Latin American countries had been part of the Bretton Woods agreement and maintained fixed, adjustable exchange rates tied to the dollar, under the shelter of capital controls. Throughout the Bretton Woods years, capital controls had provided some insulation from balance-of-payments pressures for governments that felt a need to direct monetary policy toward other targets. Controls offered the breathing space to organize orderly adjustments of the adjustable peg. At that time, Policymakers could still contemplate changing the peg without provoking a destabilizing tidal wave of international capital flows (Eichengreen 2019). But the effectiveness of controls started to erode over the years. The ongoing development of financial markets, powered by advances in telecommunications and information processing technologies, hampered efforts to contain international financial flows.

There was no turning back the clock. Moreover, with the development of competing financial centers, countries imposing onerous controls risked losing their financial business to offshore markets. Thus, developing countries that failed to liberalize risked

being passed over by foreign investors. Though inevitable, liberalization exacerbated the difficulty of pegging the exchange rate, leading a growing number of developing countries to float. Stripped of the insulation provided by capital controls, governments, and central banks in the Latin American region found the operation of pegged but adjustable exchange rates increasingly problematic. The merest hint that a country was considering a parity change could subject it to massive capital outflows, discouraging officials from even contemplating such a change. Defending the parity did not prevent balance-of-payments pressures on pegged rates from continuing to mount, or the markets from challenging pegs they suspected were unsustainable. In a high capital mobility world, defending a parity required unprecedented levels of foreign-exchange market intervention and international support. Support of this magnitude was something countries hesitated to extend when they doubted the government's willingness and ability to eliminate the source of the balance of payments imbalance.

Still, the post-Bretton Woods monetary reality did not offer many options. The alternatives to pegged but adjustable rates were polar extremes: floating and attempting to peg once and for all (Eichengreen 2008, 135). There were different pegging strategies: implementing a hard peg, a currency board, a monetary union, or going to the extreme of replacing the national currency for another currency.[21] At first, most Latin American countries ruled out floating and opted for the second option: to harden the exchange rate peg further. A few countries – Mexico (until 1994), Brazil (until 1999), and Argentina (until 2001) – did so by establishing currency boards. That is to say; they adopted parliamentary statutes or constitutional amendments requiring the government or central bank to peg the currency to that of a trading partner. A monetary authority constitutionally required to peg the exchange rate was insulated from political pressure to do otherwise and enjoyed the markets' confidence.

The problem with currency boards was that monetary authorities were constrained even more tightly than under the 19th-century gold standard from engaging in lender-of-last-resort intervention. Currency boards were attractive only for countries in exceptional circumstances: they were typically very small, their banks were closely tied to institutions overseas, and hence could expect foreign support, they possessed exceptionally

[21] On the American continent, two examples of countries that have adopted the dollar as their national currency are Ecuador and El Salvador.

underdeveloped financial markets, or (like Argentina) had particularly lurid histories of inflation. The diversity of developing-country experience during the 1980s and 1990s spawned a debate about alternative policies' efficacy. However, the global exchange-rate turbulence that began in 1994, abruptly closed that debate and led to a mass exodus towards more and more flexible exchange rate policies. The period opened with the Asian crisis, a shattering event for a region accustomed to stability and one in which exchange rates played a central role. Crises in Brazil, Turkey, and Argentina followed ad seriatim. The message seemed that emerging markets were incapable of managing the explosive combination of capital mobility and political democracy (Eichengreen 2019, 175). From the late 1990s a growing number of emerging markets, foremost in Latin America but also in Asia and Emerging Europe, embraced greater currency flexibility.[22]

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This chapter showed that, during the 20th century, capitalist credit money's institutional reality was wholly transformed. From 1875, when the gold standard prevailed, and the value of currencies was considered to be the result of money being backed by gold, the monetary system evolved into a system of fiat currencies. After the fall of Bretton Woods, both developed and developing countries have increasingly adopted floating exchange rates. However, this type of monetary policy is far from adequate for developing economies. Floating has increased monetary instability and the risk of crisis. The post-Bretton Woods world is far from a panacea. Today, no real-world variable limits the ability of countries to issue money. In the contemporary non-monetary-system, the value of money has become increasingly self-referential and dependent on market movements. This chapter also showed that, in the contemporary world, the dollar did not lose its exorbitant privilege. On the contrary, it has consolidated it. Moreover, instead of tending to symmetry, during the 20th century, the international monetary system became increasingly hierarchical.

[22] Indeed, the list of countries that have recently adopted inflation targeting regimes includes Australia (September 1994), Brazil (June 1999), Canada (February 1991), Colombia (September 1999), Czech Republic (January 1998), Finland (February 1993-June 1998), Israel (January 1992), South Korea (January 1998), Switzerland (January 2000), Mexico (January 1999), New Zealand (March 1990), Peru (January 1994), Poland (October 1998), South Africa (February 2000), Spain (November 1994 - June 1998), Sweden (January 1993), Thailand (April 2000) and the United Kingdom (October 1992).Data taken from Calvo and Reinhart (2002), footnote 15.

In contemporary fiat money systems, the value of contemporary money is no longer linked to the real world. For mainstream economists, however, contemporary money's value is not a completely arbitrary number. In their view, money's value still depends on the evaluation that social actors make of a set of economic variables, known as the 'money fundamentals' (i.e., the size of the economy's GDP and the export rate). However, an important remark that, even if the value of money (and, thus, trust in money) depends on the evaluation that social actors make of money fundamentals, these evaluations are nothing more than a complex system of expectations that make some exchange rates to be perceived as more sustainable than others. In other words, confidence in contemporary capitalist money depends, above all, on people's expectations about the future sustainability of an economy. In the meantime, there is increasing evidence that, in contemporary financial markets, most currencies' prices move at the pace of speculation.

4. One hundred years of value: the Argentine currency during the 20th century (1880-1970)

> *In 1818 the Frenchman José Rousseau, a master engraver, opened a shop in the city center of Buenos Aires. The shop was located on Cabildo Street, just one block from the main square, facing towards 'the countryside' (or at least that is what the advertisement in the newspaper said). Rosseau was in charge of printing the first Argentine banknote, issued by the then Banco de Descuentos, a bank founded with British capitals during the government of Martín Rodríguez in 1822. For 20 years this would be the only bank in the country. Rousseau used to work in an old copper sheet that had an image of Our Lady of the Rosary on the backside. The image had been painted in 1786. The banknote had a very simple design, with free spaces in its upper corners where one could write down the note's number and value by hand, a ribbon or banner in the center with the bank's name, and below, the text. Rousseau printed 7,002 notes at Pedro Ponce's printing house, which were put into circulation the same day the bank opened: Friday, September 6, 1822. At the time, the monetary authority set the minimum and a maximum number of notes issued to regulate the scope of banknotes in circulation and control if the notes would circulate only among business people or if they would also be offered to consumers.*[23]

Each country has its unique monetary history, but Argentina exemplifies well the most important standard features of the history of capitalist credit money during the 19th and 20th centuries. During most of the 19th century, the domestic money supply in Argentina was heterogeneous. There was not one uniform national currency, and there were several foreign currencies (mainly English and Spanish currencies and that from neighboring countries, such as Chile and Bolivia) circulating within the national economy alongside domestic money. At the time, paper notes issued by private banks and public agencies were printed both at home and abroad. For the most part, they were inconvertible. Although at the time, the nominal value of paper money seemed uniform, a banknote's real value varied according to the issuing bank's creditworthiness and reputation (Regalsky 2018). It was only in 1881 that Argentina issued its first national currency: the *Peso Moneda Nacional*. From then on, a single currency started to circulate within the

[23] Fragment from the article published on *Infobae* on May 18, 2020, by Adrián Pignatelli: "Cuando los primeros billetes en Argentina llevaron las imágenes de Washington, Franklin y Bolívar". Available at: https://www.infobae.com/sociedad/2020/05/18/cuando-los-primeros-billetes-en-argentina-llevaron-las-imagenes-de-washington-franklin-y-bolivar/. Last access: 23.06.2020.

country, in place of a mixture of currencies that flowed across national borders. However, to impose the circulation of the new banknotes within the national territory, the Argentine state needed to guarantee their value. At that time, the way states had to make their currencies trustworthy was by guaranteeing their conversion into gold. It was the gold standard era, in which the prevailing idea was that the value of money derived from its material backup in precious metal, usually gold. Thus, in 1881, the government set the conversion rates of the new currency into gold and silver. However, during the period in which the gold standard was in force in Argentina, the lack of genuine gold inflows frequently led to balance of payments crises that, in turn, caused repeated devaluations of the national currency and resulted in long periods of inconvertibility (Vitelli 2004). But even in these circumstances, as I will show in the following, between the 1880s and 1940s, Argentines learned to trust their currency and continued to do so for many years.

However, as of the 1930s, the money institution started to suffer deep transformations, both in Argentina and the world. The disruption caused by the First World War and the Great Depression led to the breakdown of the gold standard. In turn, the collapse of the international monetary system based on currencies that were all convertible into gold, called into question the very idea that currencies' values were an 'intrinsic' property of money. As gold became increasingly scarce, huge discussions emerged regarding where to tie money's value. Argentine politicians at the time shared the global distress caused by the breakdown of the gold standard. Indeed, they were as desperately looking for a new anchor to tie the value of the national currency (thus stabilizing its price) as everyone else. It was precisely at that time that discussions about the changing value of the peso began to appear in the national press. Journalists and members of the editorial boards, all published articles where they tried to find answers to the question of how much the peso was worth. But despite the public debates surrounding the national currency, critics had no real correlation in the local financial system, where all savings were held in pesos until well into the 1940s. However, from 1946 onwards, with the arrival of Juan Domingo Perón in government, fundamental changes took place in Argentina. These changes triggered a dramatic loss of trust in the peso, which led Argentines to take their bank savings outside the financial system and invest them in other areas of the economy, such as the market for durable goods and, to a lesser extent, the real estate market. What is more, since 1949, the country started to suffer from recurrent balance of payments crises, which only worsened the situation of the national currency. The cycles of boom and

recession, which alternated on average once every three years between 1949 and 1967, caused repeated currency crashes, which, in turn, started to uncover the immaterial, conventional and contingent nature of money's value. Thus, 1946 marks the beginning of inflation and of the daily and passive experience of the peso as a currency that could slowly lose its purchasing power in terms of goods. Moreover, the currency crashes that started in 1949 added the further realization that money's external value could plummet in record time. Accordingly, if in 1946, the Argentines started to take their savings outside the national financial system, by 1958, they were already saving in dollars. Already back then, the threats to the Argentine peso were looming on the horizon.

The Argentine peso during the gold standard (1883-1929)

In Argentina, attempts to establish a national monetary system only took shape in 1881, once the country was politically consolidated under the government of Julio Roca (Rapoport 2010). Before that date, Argentina did not have a homogeneous or stable monetary system. Although the first banknotes had begun to circulate around 1822,[24] it was only in 1867 that the political authorities tried, for the first time, to establish paper money as the main instrument for commercial exchange in the Argentine national territory. However, given that, at that time, the country was immersed in total monetary anarchy, the authorities needed to guarantee money's value if they wanted the population to accept paper money as the primary means of payment. Thus, in 1867, following the guidelines of the time, the Argentine political authorities created the Oficina de Cambios (the Exchange Office) within the Banco de la Provincia de Buenos Aires (the Bank of the Province of Buenos Aires). This entity would be responsible for issuing the first Argentine gold convertible currency (Rapoport 2010). It was a time where, globally, most paper currencies in circulation were backed by a fixed amount of precious metal, usually gold. This prevented, at least in theory, arbitrary expansions of the money supply.[25]

[24] The first Argentine entity authorized to issue banknotes was the Banco de Descuentos, a private bank with English capital, founded in 1822. Before that date, only metal coins had circulated in the national territory, but never paper bills (Vitelli 2004, 33). The bank put into circulation the first Argentine banknote: the *Peso Moneda Corriente*, an inconvertible currency which was enforced on January 9, 1826 and lasted until November 4, 1881. The bills were made in England, and some of them even portrayed the faces of US politicians, such as George Washington (Cámara Argentina de Comercio y Servicios 2018, 1).

[25] I point out that it prevented the issuance of paper money above gold reserve levels only in theory because, in practice, countries often suspended gold convertibility and issued banknotes without any metal backing. Moreover, during the gold standard, metallic coins were usually not traded for their gold weight but their face value. Both figures often differed. On this topic, see Redish (1993).

Unfortunately, like other banknotes issued before 1881 (mainly by private banks), the first banknotes issued by the exchange office only circulated in the area of the City of Buenos Aires and its surrounding district. Meanwhile, in the rest of the country, foreign metal coins (predominantly from Bolivia and Chile) continued to circulate, as well as banknotes and coins issued either by governmental agencies or by private banks, all of them mutually inconvertible (Vitelli 2004).

It was only in November 1881, with the enactment of Ley 1.130 de Unificación Monetaria Nacional (Act 1,130 of National Monetary Unification) during the government of Julio Roca, that Argentina managed to have a single gold convertible currency that circulated throughout the national territory: the *Peso Moneda Nacional* (see Image 1). The Act 1,130 created two currencies convertible into precious metals and set their conversion values: the gold peso (equal to 24.89 grams of gold) and the silver peso (equivalent to 385.8 grams of silver) (Rapoport 2010). However, the silver peso lasted only a short time and was taken out of circulation by the end of 1883. Moreover, in that year, the government ordered that both new banknotes and those already in circulation had to be backed by gold-denominated pesos. In these circumstances, banks were forced to renew their total emissions (Vitelli 2004). Thus, the year 1883 represents the official beginning of the gold standard in Argentina.

Image 1
The 5-cent Peso, with the image of Nicolás Avellaneda (1884)

Source: *Historia de la Moneda Argentina*. Report published by the Cámara Argentina de Comercio y Servicios (2018)

As I showed in the previous chapter, it was a period when the conception of commodity-money prevailed. Although for a long time, a large part of the money in circulation in the world had already consisted of paper notes, during the gold standard, the dominant view

was that money's value was a consequence of the 'intrinsic' value of the precious metals that served as money's backup. Even if, at that time, the money circulating in the global economy was no longer wealth itself, but a representation of it, the link between money and gold was still a crucial feature of money's value. Moreover, the responsibility for maintaining the parity relationship between the notes issued and gold was on the states, which gradually assumed the role of ultimate guarantors of the value of money. In Argentina, since the adoption of paper money in 1883, this function was fulfilled by a multiplicity of public issuing banks first and, since 1899, by the Caja de Conversión (The Conversion Office). Thus began the story, which I intend to narrate in this chapter, of the Argentine state's construction of the *promise in its national currency's long-lasting value*.

Unfortunately, the first national-scale money experience of 1883 lasted only a short time.[26] In October 1885, economic and financial problems forced the government of Julio Roca to suspend convertibility due to a lack of gold. Gold convertibility did not resume again until fifteen years later, in 1899. When in 1885 gold convertibility was suspended, different means of payment came back into circulation within the country's economy. Foreign currencies, which had been banned in 1881, were allowed to circulate again. As a consequence, between 1885 and 1899, economic transactions in Argentina were still made in a variety of different means of payment: metals (such as gold and silver), foreign currencies from different countries (mainly bordering countries, such as Chile and Bolivia, or pounds sterling) and various types of banknotes issued by different banks and national agencies. As a rule, these different monies were not only inconvertible into gold but also among each other (Rapoport 2010).[27] Argentina could finally reestablish gold convertibility in 1899. That year, the government enacted a Ley de Conversión (Conversion Act), that forced the conversion office, created in 1890, to convert paper money into gold at a different exchange rate than the one established in the original act of 1881. The new price was set at 44 cents of gold peso for each paper peso (that is, 2.27

[26] Technically, there were two convertibility experiences before 1883 in which gold convertible banknotes were issued locally. However, the circulation of these notes was limited to the City of Buenos Aires and its surrounding district. The first experience took place between 1822 and 1826 when the Banco de Descuentos was allowed to issue gold convertible notes that could circulate within the City of Buenos Aires. The second took place between 1867 and 1873 when the Oficina the Cambios within the Banco de la Provincia de Buenos Aires was authorized to issue notes backed by the national government (Vitelli 2004).

[27] Remarkably, during this phase of inconvertibility, the government passed an act (the Ley de Bancos Garantidos), that allowed any bank, private or public, to issue inconvertible banknotes. Instead of solving the country's economic problems, the act fueled a strong speculative bubble, which led to a dramatic crisis and the first national default in Argentine history. The Argentine currency was then devalued in 209%. On this topic, see Rapoport (2010).

paper pesos per each gold peso), and was in force until the beginning of the First World War (Regalsky 2018). Therefore, from 1899 onwards, Argentina was again into the gold standard, and its monetary system was structured around the conversion office, which was in charge of money issuance.

As mentioned, between 1875 and 1936, gold was the dominant international trade currency (Eichengreen 2019). Therefore, all the countries that participated in the world trade network had to set the values of their currencies in gold, a practice that encouraged and facilitated international trade. Given that the countries kept the values of their currencies in gold fixed, they had to buy or sell gold at pre-established prices. Similarly, their gold reserves had to be sufficient to back their money issuance according to their specific conversion rates. Due to this very automatic conversion mechanism, the activity of the currency-issuing agencies (in this case, the conversion office), was limited to passively monetize trade balance surpluses and, conversely, to contract the monetary base when there was a trade deficit (Regalsky 2018). The close relationship between the inflow and outflow of gold from the country, on the one hand, and the internal circulation of money, on the other, had significant consequences for the national economy. In fact, under the rigid conditions imposed by the gold standard, fluctuations in the money supply were continuous and had little to do with the growth or lack of growth of the real economy. On the contrary, they had much to do with the inflow and outflow of international reserves. Thus, in those occasions where the leakage of reserves reached critical points, it was common for countries to suspend convertibility to preserve their gold stocks (Rapoport 2010). During the gold standard, Argentina's recurring lack of reserves triggered long periods of inconvertibility (see Table 1). In fact, gold convertibility was only maintained at specific times, while the norm was rather inconvertibility (Vitelli 2004). In fact, in those years, Argentina was already suffering balance of payments crises. Back then already, the frequent crises led to the development of a stormy relationship between the state of the country's external accounts and the ups-and-downs of its national currency.

To better understand the dynamics behind the convertibility-inconvertibility cycles characteristic of the Argentine monetary system during its early days, it is necessary to briefly review the main features of the Argentine growth model at that time. Between 1880 and 1930, as a result of the industrialization process that Europe was going through,

world trade was booming. At that time, European nations (mainly England) offered manufactured goods and financial capital in search of raw materials and high value-added extraction circuits. In this scheme, Argentina's economic strategy was based on the exploitation of its comparative advantages. Thus, the national economy was mainly oriented towards producing and exporting agricultural products to industrialized countries.[28] With the money collected by this trade, Argentina could pay for its imports from European countries (Ferrer 2012). Moreover, given its lack of domestic capital, the Argentine economy was highly dependent on foreign capital inflows. These capitals used to enter the country either as loans or as direct foreign investments and allowed to finance different infrastructure works, such as ports and rail networks (Rapoport 2010).[29]

As it was, an economy that exported primary goods, Argentina was very vulnerable to possible international trade disturbances, which were incredibly frequent during the late 19th and early 20th centuries. The vulnerability of Argentina's economy had to do with the fact that its exports were mostly raw materials, whose prices were set in international markets and were very variable in the short term. In contrast, Argentina's imports, were mostly manufactured goods and supplies and had higher and more stable prices. This trading scheme made Argentina very vulnerable to rapid changes in its trade balance (Ferrer 2012). Indeed, the country's dependence on international trading conditions often led to a lack of genuine capital inflows, which had to be replaced by foreign loans or direct capital investments. Due to these circumstances, during the gold standard, the country suffered successive economic crisis (including the crises of 1873-74, 1884, 1890, 1913-14, and 1929-30), which lead to a deterioration of its trade balance and a lack of genuine gold inflows (Gerchunoff and Llach 2003). Although the specific reasons that triggered each one of these crises were different, almost always they included a combination of the same factors, namely: climatic fluctuations that affected crops and livestock production; price variations of Argentina's exports within the international markets; and interruptions in international trade, that were caused by the significant war conflicts of the first half of the 20th century (Ferrer 2012).[30]

[28] During the late 19th century, leather and wool were the main Argentine export products. Later on, meat and cereals (such as wheat and flax) were added to this list. Cereal production was especially important until the beginning of the First World War.

[29] During the late 19th and early 20th centuries, Argentina went through two cycles of indebtedness. The first cycle lasted from the early 1880s until the crisis of the 1890s. The second cycle began in 1905 and extended until the outbreak of the First World War.

[30] On the specificities of these different crises see Ferrer (2012); Gerchunoff and Llach (2003); Rapoport (2010).

Beyond each crises' specificities, the important thing is to emphasize that, in each of them, Argentina did not have enough gold to cover its expenses. These expenses came from two items: the cost of imports and the repayment of its external debt. Thus, the negative trade balances resulted in an almost chronic lack of gold reserves that led to long periods of inconvertibility of the national currency into gold. Seen from this perspective, it is not surprising that the conversion office only became fully functional in the early years of the 20th century. This was precisely the moment when Argentine exports made a formidable quantitative leap, which allowed - together with foreign investments -, to generate a positive net inflow of gold that made the country capable of sustaining convertibility for several years. This period of prosperity, the longest of this phase, ended in 1913. From then on, convertibility was suspended again as capital inflows decreased (Rapoport 2010).

Table 1
Alternating periods of convertibility and inconvertibility in Argentina during the gold standard (1867-1929)

Year	Monetary regime	Description
1867-1873	Different agencies and private banks issued gold convertible banknotes that circulated within a limited territory.	Both public and private banks were allowed to issue gold convertible currencies for the first time. However, these currencies only circulated within a small territory, which usually included the City of Buenos Aires and its surrounding district.
1873-1881	A phase of inconvertibility in which different means of payment circulated within the national territory.	The lack of gold led to the suspension of gold convertibility in 1775. That same year, the president Nicolás Avellaneda created the *Peso Fuerte* and tried to restore gold convertibility. However, the approval of the Ley de Bancos Garantidos in 1887 fueled uncontrolled money issuance, thus leading to a new crisis.
1881	The national government issued the first gold convertible currency: the *Peso Moneda Nacional*.	In 1881 Act 1,130 of National Monetary Unification was enacted. The act created two national currencies convertible into gold and silver that would start to circulate within the national territory. The circulation of foreign currencies was prohibited.
1883-1885	The *Peso Moneda Nacional* became the only convertible currency within the national territory.	The government took the silver peso out of circulation, and the gold standard prevailed.
1885-1899	A new balance of payments crisis forced the government to suspend gold convertibility for 15 years.	The Banco Nacional and the Banco de la Provincia de Buenos Aires were authorized to issue legal tender without converting the banknotes they issued into gold. There were two parallel monetary systems in the country. Within the national economy, transactions were paid with paper money, whereas foreign trade was paid in either gold or pounds sterling.

1899-1914	Gold convertibility was restored, but the exchange rate was modified.	In 1890 the government created the Caja de Conversión. The agency started to function in 1895 and was responsible for issuing banknotes only in those moments when gold entered into the country due to a trade surplus.
1914-1927	A new balance of payments crisis put an end to gold convertibility.	Following the outbreak of the First World War, the gold standard was suspended, and international trade fell sharply. Argentina faced enormous difficulties with exporting its production. When the country's trade balance became negative, Argentina had to suspend gold convertibility. The crisis continued until 1918.
1927-1929	The government restored gold convertibility and fixed the exchange rate.	In the 1920s, Argentina's economy began to recover. During the post-war period, Argentina's exports recovered, and the country enjoyed a trade surplus for several years. To preserve the level of exports, the national government fixed the exchange rate and restored gold convertibility.
1929	The 1929 Crash caused the breakdown of the international monetary system based on the gold standard.	The 1929 crisis unleashed a worldwide recession that led to the definitive breakdown of the gold standard and multilateral trade collapse. Like other nations, Argentina suspended gold convertibility in order to avoid the leakage of gold.

Source: Own elaboration based on Ferrer (2012); Fundación de Investigaciones Económicas Latinoamericanas (1989); Gahn (2016); Gerchunoff and Llach (2003); Kiguel (2015); Rapoport (2010); Vitelli (2004).

After 1913, two other significant events led the government to suspend gold convertibility, again for an extended period: the First World War and the 1929 Crash. By 1914, the postwar period's enormous economic imbalances led to a general disruption of the gold standard on a global scale (Eichengreen 2019). In that context, Argentina was no exception. At that time, the country was facing enormous economic difficulties, originated mainly in its inability to export its products to the European nations, which were devastated by the war. This lack of markets interested in buying the Argentine agricultural production resulted in a deep deficit in its trade balance, which led the government to suspend gold convertibility between 1914 and 1927 (Rapoport 2010). Although Argentina was able to reestablish gold convertibility in 1927, this did not last. The worldwide recession unleashed after the breakdown of the New York Stock Exchange in 1929 caused the collapse of global trade and led to the international suspension of the gold standard, which, at the time, faced its terminal crisis. In such circumstances, industrial activity and world trade fell in tandem, and commodity prices plummeted due to a lack of buyers. As a result, Argentina not only exported less agricultural products but also did so at lower prices than before. Thus, its foreign exchange surpluses fell sharply, and the trade balance became negative again (Ferrer 2012). The combination of adverse factors forced the country to reduce its purchases of

manufactures and machinery. Despite this, the government encountered severe difficulties to cover its obligations and repay the external debt.

All in all, during the gold standard, Argentina suffered recurrent crises and a chronic lack of gold reserves, which led to long periods of gold inconvertibility and forced the government to devalue the national currency on more than one occasion. However, despite the difficult circumstances, until well into the 1940s, the Argentine state established and maintained a trustworthy currency. While it is undeniable that during the gold standard era, the country faced severe difficulties and broke, on more than one occasion, the promise to convert its currency into gold, the Argentine people at that time learned to trust their currency and continued to do so for many years. This trust was manifested, for example, in the consolidation of a financial system which, as I will show in the following, was able to offer long-term saving options in pesos until well into the 1940s.

But how can we explain sustained trust in money despite the recurring crises? The lack of further research that directly addresses the topic leaves us with only hypotheses. There are probably several reasons to consider. In part, the reason behind the Argentines' sustained trust in their national currency could be that they did not have much contact with foreign countries and cared little about their currency's external price in gold. Alternatively, the reason could be that, at the beginning of the 20th century, inconvertibility was far from being a local singularity. A third reason is perhaps that the political authorities of the time were careful enough to (and politically capable of) solving monetary crises in a way that allowed them to preserve the value of the most popular long-term saving options back then. As I will show in a moment, by maintaining the value of the National Mortgage Certificates (Cédula Hipotecaria Nacional) during the crises of 1890, the authorities protected Argentine savers from incurring dramatic losses. This would change in later times. Furthermore, a fourth reason may be that, in the years of the gold standard, the US dollar was not yet a socially-widespread instrument to measure and quantify the losses brought by each monetary crisis, as it would be later on. So, all in all, despite the difficult political and economic circumstances that characterized the beginning of the 20th century, when monetary shocks were permanent, Argentines were capable of start and continue to trust their currency for many years. However, as I will

show in the following, the complex monetary circumstances of the 1930s and 1940s would start to shake the foundations of public trust in the Argentine peso.

The early debates about money's value (1930-1946)

The 1920s and 1930s were years of essential transformations in monetary affairs. As I showed in the previous chapter, by 1930, the breakdown of the international monetary system based on a gold standard led developed countries to start to think of new solutions. Eventually, negotiations gave rise to a new international monetary system that would take its final shape in 1944 during the Bretton Woods agreements. Since then, the dollar would remain at the apex of the international hierarchy of currencies. But by 1930, the world was in a crisis, and so it was the Argentine currency. England's abandonment of the gold standard in 1931 had forced countries under British influence (including Argentina) to take urgent measures to prevent the massive drainage of gold. In a world in crisis, the local government was no exception. Since gold was no longer sufficient, everywhere, the economic authorities faced the same problem: how to continue guaranteeing money's value in the absence of sufficient gold? In Argentina, the first answer came in 1931 with the imposition of exchange controls intended to stop gold leakage. Later on, in 1935, the government took a second measure; namely, it created Argentina's central bank and established that gold reserves had to cover the value of, at least, 25% of the banknotes issued by the bank. The measures that the government adopted during those years sparked off a heated debate that reached the national press and lasted several years. Both the journalists and the business elites of the time accused the government of manipulating the 'natural' or 'real' value of the national currency. However, despite the widespread social debate, savings within the local financial system continued to be in pesos until, at least, the mid-1940s.

In 1931, the difficult international situation caused by the gold standard breakdown was aggravated by some internal conditions. By that time, Argentina's national economy was in a critical situation due to the Great Depression, which shrunk exports, thus deteriorating the country's external accounts sharply. Besides, the bad harvest of 1930 only worsened the situation, leading to a sharp increase in the trade deficit (Gahn 2017). In this unfavorable context, the government (which needed the country's gold to pay the external debt and import essential supplies) was forced to find mechanisms to stop the leakage of

gold and foreign currency. Thus, on October 10, 1931, just three weeks after England abandoned the gold standard, the conservative (de facto) government of general José Félix Uriburu founded the Comisión de Control de Cambios (Exchange Controls Commission), which started to operate in November 1931. From that moment on, exchange controls were frequently enforced in Argentina (Fundación de Investigaciones Económicas Latinoamericanas 1989).

The exchange controls imposed in 1931 consisted of a selective restriction of gold and foreign currency movements, which was intended to curb the continued outflow of gold reserves from the country, thus allowing to reestablish the trade balance. The primary function of the exchange controls commission was to monopolize and regulate gold and foreign currency outflows and inflows to the country, a task for which it implemented a series of measures, namely: a) setting the exchange rate; b) forcing exporters to settle export transactions in the official foreign currency market; and c) imposing a series of controls on foreign currency movements, which, from that moment on, had to comply with a predetermined list of priorities. In this regard, the commission established as a first priority the use of gold reserves for the payment of the external debt. In the second place, were imports of raw materials for the provision of local industries, fuels, and indispensable consumer goods. Other transactions, such as tourism expenses and the sending of remittances abroad, were severely limited, as well as the import of non-essential goods. Most imports were regulated through a permit system. The commission also established that foreign currency transactions had to be made in specially authorized banks (Gahn 2017).

Not surprisingly, the Argentine politicians shared the global distress generated by the breakdown of the gold standard. As everywhere else, in Argentina, the government was desperately seeking a new anchor to which to tie the value of the national currency, thus stabilizing its price. The *"situation of uncertainty and expectation"* caused by the British abandonment of the gold standard was mentioned in the Decree of October 10, 1931 (the norm that imposed foreign exchange controls in Argentina). More than that, the norm also stated that the time had come *"for the peso to take its natural price"*.[31] Interestingly, the exchange controls commission decided not to follow the 1931 devaluation of the pound

[31] Quotation from the Decreto del Poder Ejecutivo 1.060 (National Decree 1,060), published in the Official Gazette on October 19, 1931.

sterling. Instead, the commission decided to link the Argentine peso's price to the US dollar and the French franc, two currencies whose prices were still linked to gold (Fundación de Investigaciones Económicas Latinoamericanas 1989). However, the devaluation of the dollar in 1933 shook the foundations of the international monetary system. The movement reopened the question about the 'real' or 'natural' value of the Argentine peso. As expected, the distress caused by the fluctuating price of the national currency was not exclusive of politicians, but radiated to society as a whole, especially to journalists and business elites. Discussions about the changing value of the peso were reproduced in several spheres, including the national press of the time, where journalists and members of the editorial boards published articles where they tried to find answers to the question of how much the peso was worth. These articles usually distinguished between what they called the 'real' value of the peso from another 'artificial' value set by the government through its exchange controls policy (Luzzi and Wilkis 2019, 37).

During the 1930s and 1940s currency regulations became a permanent motive of criticism in Argentina. Remarkably, the critique was always the same: financial experts, journalists, and politicians from opposition parties, all accused the government of manipulating the value of the national currency and preventing the Argentine peso from taking its 'natural' price. As noted in an editorial published in the national newspaper *La Prensa* in 1940: *"since Argentina is subject to foreign exchange controls, national development is delayed due to a lack of foreign currency. Moreover, foreign currencies are missing because, for 18 years, the government has been taking them from their natural owners".*[32] In this climate of widespread public contestation, the government was permanently trying to call off the debate, always without success. In 1933, for example, the minister of finance, Federico Pinedo, introduced a reform in foreign exchange regulations in an effort to contain widespread criticism and eliminate the illegal foreign currency market. Mainly, Pinedo's reform split the foreign currency market in two. On the one hand, a free market in which the dollar price was higher and fluctuated following market variations. On the other, an official foreign currency market in which the exchange rate had a lower fixed value established by the government (Gahn 2016). The official market was the place where the profits obtained from all transactions legally authorized by the exchange

[32] Quoted in Luzzi and Wilkis (2019, 42). The quote belongs to an article published at the newspaper *La Prensa*. Unfortunately, the authors do not indicate the exact date in which the article was published nor the article's title.

controls commission had to be settled,[33] including the profits coming from the trade of traditional exports. On the other hand, the free market was the place for trading profits in foreign currency coming from all remaining transactions. Illustratively, the text of Pinedo's Decree noted that the decision to split the foreign currency market in two was of "*an obvious public convenience*". For the minister, the division allowed "*the prices of foreign currencies to reflect the real value that the market attributes to the national currency*", and allowed the peso *"to take its natural price*".[34] The reform gained some support during the first months after its introduction. However, criticism soon reappeared, and the complaints that the government was manipulating the peso's value spread across the public once again. The following passage of an editorial published in 1934 in the national newspaper *La Prensa* clearly illustrates the situation:

> "*The government ensures itself extraordinary profits [...] it trades foreign currency, but it does not do it openly [...] but, actually, inside a darkroom [...]. The real availability of foreign currency is unknown […] the total number of transactions is also unknown, [we only know] the average exchange rate [that results from these transactions]. Thus, the government always wins, and the merchant always loses [...]. This system [is] not democratic, but secret and arbitrary for those governed, because the government is the only one that can see inside the darkroom that the foreign exchange market is today".*[35]

All in all, during the 1930s and 1940s, monetary debates were commonplace in Argentina. For many years, public contestation surrounded the national currency and its supposedly 'artificial' value in gold (or foreign currency). Still, the truth is that these critiques remained limited to a handful of journalists and business people, and had no correlation

[33] The official foreign currency market worked as follows. Through a gauging system, the government established the official price at which traditional exports had to be traded in international markets. Thus, exporters were obliged to settle their official profits on the official dollar market. These profits had to be converted into pesos at the official exchange rate. In the meantime, other profits could be traded in the free dollar market. So, if, for example, exporters were able to sell their products at a higher price than the one established by the government, they could liquidate the additional profits (those profits earned above the official price of the goods traded) on the free market, at a higher exchange rate. Foreign exchange transactions related to non-traditional exports, exports to neighboring countries, foreign investment and remittances to Argentina also flowed to the official foreign currency market.

[34] Quotation from the 1933 Decree, which modified exchange rate controls in Argentina, quoted in Luzzi and Wilkis (2019, 34).

[35] Quotation from the editorial note "El cuarto oscuro de los cambios", published in 1934 in the newspaper *La Prensa*, quoted in Luzzi and Wilkis (2019, 36).

in the local financial system, where savings were still overwhelmingly held in pesos. However, as I will show later in this chapter, from 1946 onwards, with the election of Juan Domingo Perón as president of Argentina, fundamental transformations took place. These changes deepened the public's uneasiness about the long-lasting value of the national currency and triggered a dramatic loss of trust in the peso that, this time, was indeed felt in the financial system. However, before turning to that part of the story, I will first review other remarkable transformation occurred in Argentina in the 1930s: the creation of its central bank.

The creation of the Argentine central bank (1935)

By 1932, Argentina had two agencies that performed functions that would have corresponded to a central bank: the Caja de Conversión and the Comisión de Control de Cambios. In addition to these two agencies, there was also a third important entity: the Banco Nacional de la República Argentina (the National Bank of Argentina), the most important bank in the country. The national bank was a public bank that managed the government's accounts and the clearinghouse, which also granted rediscounts to other banks (Sember 2018). However, given that the system regulated by these three entities had proved insufficient to prevent the leakage of gold - and the subsequent currency devaluations - during times of crisis, there was already for several years the ongoing project to create a central bank.[36] Indeed, without a central bank that could regulate the monetary system, the excessive rigidity of the gold standard had long prevented the local management of the monetary policy, causing external cycles to have a decisive influence on the national economy (Ferrer 2012).

The world of the 1930s was a world in which the creation of central banks that could regulate monetary systems and help to stabilize domestic economies, was becoming increasingly important. By that time, John Maynard Keynes' ideas had gained enormous popularity within economics, and states had started to be seen as key actors in the economic sphere. In essence, the Keynesian paradigm strongly opposed the liberal doctrine and pointed out, instead, that in the face of a severe economic crisis, the national

[36] Already in 1917, president Hipólito Yrigoyen together with his minister of finance Pedro Salaberry proposed the creation of a central bank. However, the National Senate sent the project to the commission of finances, which never discussed it. In 1919, a second project was submitted, which addressed previous objections, but it had the same fate as the previous one and was never discussed (Rapoport 2010).

economy could not return to a state of equilibrium in and of itself. On the contrary, one of Keynes's central ideas was that, in times of recession, the government needed to intervene in the economy, increasing public spending and stimulating demand, although this implied an increase in the fiscal deficit. Within this scheme, central banks played a crucial role (Rougier and Sember 2018b).

Other factors contributed to giving even more impetus to the creation of central banks during the 1920s and 1930s. As I showed previously, it was a context in which the *value regime* that sustained trust in capitalist currencies' enduring value had entered into crisis. As gold was becoming increasingly scarce, the different countries' governments were forced to reconsider the relationship between the value of their national currencies and the gold reserves that backed such value. In the new circumstances, two solutions were proposed: first, to find a global system that could efficiently manage increasingly scarce gold reserves; and, second, to diversify the metallic material foundations that sustained trust in capitalist currencies, thus granting more elasticity to the system (Ocampo 2016). In line with these proposals, countries gradually began to create central banks, which will now be in charge of concentrating and managing gold reserves. Thus, the creation of central banks around the world received a significant boost. Under the aegis of the League of Nations, several central banks were created in Europe, such as the ones in Austria, Hungary, Greece, and Bulgaria. Simultaneously, several missions of 'money doctors' (groups of advisors, mainly from England and the United States) were sent to different countries in both the American continent and the former British colonies (Rosenberg 2003). Mainly, these experts sought to advise non-developed countries on how to impose banking and monetary reforms in general, and, especially, on creating rather orthodox central banks (Sember 2018). Several of these missions encouraged the creation of central banks in many Latin American countries. Among them, the missions of the American Edwin Walter Kemmerer, for example, had an essential role in the creation of the central banks of Colombia, Chile, Ecuador, Bolivia, and Peru, countries which, in turn, benefited greatly from significant capital inflows coming from the United States (Drake 1989).

On the other hand, in Argentina and Brazil, the relationship with England prevailed. Thus, both countries' chief advisor was Otto Niemeyer, who, in 1932 (after having advised Brazil), traveled to Argentina to evaluate its financial system. In 1933, the British specialist prepared a report advising the Argentine state on how to design the future

central bank (Sember 2018). Unsurprisingly, many of the measures proposed by Niemeyer in his report reflected the British interests. At that time, it had been several years since England had been pressuring the Argentine government to modify its monetary and banking system. The British government wanted Argentina to remove its exchange controls and allow British companies to remit their profits to England. Also, England asked Argentina to restore gold convertibility (suspended in 1929) and adhere to the gold-exchange standard. For the British, Argentina had to accept keeping a substantial part of its foreign reserves in foreign currency (preferably pounds sterling). This way, a large amount of gold would be released (Sember 2018). Such demands were part of a broader strategy, with which England sought to strengthen the role of the pound sterling as a world reserve currency and of London as an international financial center. In that context, the creation of a central bank in Argentina was functional to the British interests, since it would serve both to strengthen the international role of the pound sterling and to cope with the global gold shortage. Niemeyer indicated these advantages in his report:

> *"One immediate benefit to the world at large of the establishment of a central bank in Argentina would be the release of a considerable amount of gold. Owing to the present currency system the gold held in Argentina is considerably in excess of the amount considered necessary in countries where the note issue is in the care of a central bank. Even now the proportion of gold in the Conversion Office and the Banco de la Nación to notes actually in circulation is in the neighborhood of 100%, and as the gold holdings of the country are about 90 million pounds, it will be seen that if a proportion of even 50% gold - or better still a gold exchange standard - were adopted, probably as much as 40 million pounds would be released".*[37]

As it has already been said, it was a context in which the central countries were looking for strategies to deal with the global gold shortage. In such circumstances, the debate about how much gold a country needed to give credibility to its monetary system became increasingly important. The discussion was not new. It had begun in the 16th century

[37] Quoted in Sember (2018, 77). Original source: Internal Memorandum Argentina, January 3, 1930. Folder OV9/3, Overseas Department: Papers of Otto Ernst Niemeyer: Argentina. I thank Florencia Sember for giving me access to the original quote in English.

when the European nations started to replace gold and silver coins with paper notes. At that time, banknotes used to be fully backed by gold coins. However, western economies had long since realized that they did not need to back their banknotes with 100% gold coins to give credibility to their monetary system. Thus, since the end of the 18th century (especially after the Bank of England suspended convertibility to gold in 1797), there were great debates that addressed this issue. The Bank of England Charter Act of 1844, for example, regulated the ratio of notes to gold with a reserve ratio of 30%. This meant that gold reserves had to cover the value of, at least, 30% of the banknotes issued by the Bank (Redish 1993). For its part, the US Act of 1913, which provided the Federal Reserve with a regulatory framework, established that the US central bank needed to support its paper currency with at least 40% of its value in gold (Richardson, Gou, and Komai 2018).

Naturally, beyond England's wishes, Argentina had its own interests to defend. But avoiding British pressure was not easy at the time. Especially because England was Argentina's main commercial and financial partner. England did absorb not only most of the meat exports but also had significant investments in the country. British capitals controlled most of the meat processing plants and rail transport, thus monopolizing the meat trade (Murmis and Portantiero 2019). In these circumstances, it is not surprising that commercial and financial dependence led Argentina to make significant concessions to the British. Still, the design of the central bank was not part of these concessions (Ferrer 2012).[38] In 1934, and after several failed projects, the minister of finance Federico Pinedo, entrusted Raúl Prebisch (at that time an advisor in the ministry of economy), the task of reviewing Niemeyer's project. In his review, Prebisch introduced significant changes, which mostly had to do with an early conception of the use of the bank's countercyclical policy, aimed at counteracting the effects of balance of payments crises (Rapoport 2010). Unlike the British project, which proposed that Argentina adopted a gold-exchange standard, Prebisch was against the idea that Argentina had to maintain its international reserves in foreign currency, an option that he limited to 10% of the total reserves. Convincingly, Prebisch argued that such an option was risky since the 1929 crisis had shown that even countries with the strongest currencies could leave the gold standard. And in fact, during the Great Depression, the losses suffered by those central banks that

[38] In 1933 Argentina signed a tariff pact with England (the Roca-Runciman Pact). In this pact Argentina made several concessions to England, among them, it agreed to sell it the meat at a preferential price, to give it facilities to remit the profits of the British companies to England and it granted the concession of all the means of transport of the City of Buenos Aires to a British company (Gerchunoff and Llach 2003).

had kept their foreign reserves in currencies of countries that later abandoned gold convertibility were significant (Sember 2018). Regarding the general composition of the international reserves, the project proposed by Prebisch envisaged a gold guarantee for the national currency in circulation (mainly banknotes and deposits) of 25%. The guaranty would also secure transactions abroad and establish a limit to money issuance.[39]

At the beginning of 1935, and after countless failed projects, the National Congress passed Act 12,155, which created the Central Bank of Argentina. The entity began to operate in May of that same year (Sember 2018). The central bank's primary function was to issue the national currency and maintain its value. For these tasks, the central bank needed to *"concentrate sufficient foreign reserves"*, and to *"moderate the sharp movements in the currency's value and in the stock of internal credit"*.[40] The central bank also had to regulate the amount of credit within the economy; to promote commercial, industrial and agricultural activities; and act as the government's financial agent (Rougier and Sember 2018b). On the other hand, the initial idea that the central bank had to be a completely private entity did not prosper, and the state ended up contributing 50% of the share capital. Consequently, in its origin, Argentina's central bank was a mixed agency. That means, that all the national and regional public banks, the national private banks and the foreign banks based in the country, participated in the central bank's direction. However, the central bank's legal mandate established that it was the national government that was in charge of appointing the president of the entity. The first president of the institution was Enrique Bosch. Raúl Prebisch, in turn, took over the general management of the bank (Rapoport and Guiñazú 2016). Once the central bank was created, it partially took over the tasks related to foreign exchange controls. However, the exchange controls commission continued to be responsible for granting the permits authorizing imports and remittances. Meanwhile, the central bank was in charge of buying and selling foreign currency to banks in the official foreign currency market (as long as the commission had authorized the transaction). Also, the central bank monitored transactions in the free foreign currency market.

All in all, by 1935, Argentina had managed to establish its central bank, implement a monetary policy capable of fostering the economy's internal growth, and guarantee

[39] The British Project proposed a gold backing of 33% (Sember 2018).
[40] Quotation from Ley No 12.155, Artículo 3; cited in Sember (2018, 83).

stability conditions that could support the value of its currency. With a central bank whose gold reserves were sufficient to backup almost one hundred percent of the currency in circulation, in 1935, Argentina's currency was completely trustworthy. In fact, developed countries (with England in the lead) demanded the Argentine government to release some of its gold reserves, thus contributing to alleviating the global economy's liquidity problems. In sum, even in the complex monetary scenario of the 1930s and 1940s, and having to resort to exchange controls and protectionist policies, which were a permanent source of public contestation, Argentina had been able to guarantee the value of its currency. One of the strongest evidences of such a situation was the existence of a financial system in which long-term saving options in pesos were dominant. However, as I will show in the next two sections in 1946 the situation would change dramatically. From that year onwards, with the election of Juan Domingo Perón as president, fundamental transformations took place in the Argentine economy, which deepened the public's uncertainties about how stable the national currency's value was. In particular, two dramatic changes (the rise of inflation and the disappearance of saving options from the national financial system) triggered a dramatic loss of trust in the peso, which this time would indeed be felt in the financial system.

The transformations of the Peronist's years (1946-1955)

Foreign exchange controls imposed in Argentina in 1931 had sparked off a heated social debate on the nature of money's value. The debate can be found in the national press of the time, as well as in graphic humor, theatre plays and other cultural productions that were published during those years (Luzzi and Wilkis 2019). Still, setting public debates aside, an analysis of the national financial system in the early 1940s clearly shows that the Argentine population still trusted their currency. Indeed, until 1941, Argentines saved in pesos. At the time, almost forty years of low inflation had fostered the development of local currency denominated saving options, some of which had become very popular. As Table 2 shows, in December 1941,[41] all saving instruments within the financial sector

[41] This data is taken from the dissertation of Eduardo Corso (2015, 75). In footnote 43, the author explains why he chose 1941 to analyze the Argentine non-financial private sector asset portfolio (that means the asset portfolio of the Argentine families and business companies). In particular, Corso points out that this year is particularly good for assessing the asset portfolio composition of the Argentine families and business companies. This is because it was precisely in 1941 that the government carried out a debt swap that included all saving instruments that private agents at the time could have. In this regard, the records of that

belonging to Argentine families and companies were denominated in the local currency. Short-term saving options included different instruments. Around 51% of this portfolio consisted of sight deposits in pesos held at private and public banks. Meanwhile, term deposits were not yet a significant option for placing one's savings in the country. In addition to bank deposits, Argentines also used to hold their savings in deposits accounts at the Caja Nacional de Ahorro Postal (the Bank of the National Post Office), an agency founded in 1915, which sought to capture small deposits (Rougier and Fiszbein 2004). On the other hand, long-term savings represented around 33% of all savings and were mainly concentrated in two assets: the Cédula Hipotecaria Nacional (the National Mortgage Certificate) and public bonds. Both instruments had a maturity of more than thirty-seven years, were denominated in pesos, and yielded a fixed interest rate, also in pesos (Corso 2015).

Table 2: Financial asset holdings of the Argentine families and companies as of December 1941

	Nominal Value		
	Millions of pesos	**Percentage of total assets**	**Percentage of GDP**
Money in circulation	1,147.0	14.4%	7.1%
Bank deposits	4,058.9	51.1%	25.2%
Checking accounts	1,543.5	19.4%	9.6%
Sight deposits	2,125.1	26.8%	13.2%
Term deposits	390.3	4.9%	2.4%
Government debt	1,325.2	16.7%	8.2%
Mortgage certificates	1,300.2	16.4%	8.1%
Stocks	112.0	1.4%	0.7%
Total	7,944.0	100%	49.3%

Source: Corso (2015, 68)

As noted by Eduardo Corso (2015), for more than 50 years, there had been a specific instrument that captured the preferences of the public and became the main instrument used by Argentine families for long-term saving: the national mortgage certificate. Created in 1886, it was an instrument for enabling Argentines to acquire property through mortgage loans granted by the Banco Hipotecario Nacional (the National Mortgage Bank), with a fixed interest rate of around 6% and with very affordable installments,

year provide an overall picture of the stocks of the different financial assets Argentine families and companies had at the time.

which facilitated access by small savers. Until 1946, the national mortgage certificate was the Argentines' most popular long-term saving instrument. According to Corso, the reason behind its success was the certificate's triple guarantee: the guarantee provided by the mortgaged property itself, the guarantee provided by the payments already deposited at the bank, and that provided by the National Treasury as a backup to the bank (Corso 2015). An interesting aspect to highlight is the fundamental role the financial crisis of 1890 played in cementing public trust in the national mortgage certificate. In fact, during the crisis of 1890, the national mortgage bank was one of the few institutions which was able to maintain the value of its mortgage deposits, thus protecting its customers from incurring massive losses on their assets. This behavior was remarkable. In fact, due to the magnitude of the crisis, many other banks went bankrupt. For example, this was true of the Banco Hipotecario de la Provincia de Buenos Aires (the Mortgage Bank of the Province of Buenos Aires), a public, regional bank, dependent on the regional government, well-established, and with a better reputation than the national mortgage bank. However, the mortgage bank of the province of Buenos Aires defaulted, was liquidated, and its mortgage certificates were compulsorily converted into government bonds to be repaid 15 years later and with a large discount (Gómez and Gilbert 2019). In contrast, the national mortgage bank, which was also a public bank but depended on the national government, managed to emerge relatively unscathed from the crisis and maintain the value of both its mortgage certificates and the real estate properties they related to (Olarra Giménez 1971). Remarkably, fifty years after the 1890 crisis, people still placed deep trust on the national mortgage bank's mortgage certificates. In this regard, the example clearly illustrates the importance of public authorities' decisions and actions for preserving trust both in the currency and in saving instruments. Indeed, by preventing savers from suffering dramatic losses, the government's officials and the authorities of the public financial institutions affected by the 1890 crisis had a decisive impact on preserving trust. Put differently, it was not just the crisis but also how the crisis was managed and resolved, which had a crucial effect on the preservation of trust both in money and in the financial system.

During the 1940s, the second most important long-term saving option of the Argentines were government bonds. It is essential to notice that the market for government debt was a relatively new market at that time. It had only started in 1935, in parallel with the creation of the central bank. Understandably, it was a rather small market whose

participants included insurance companies, banking and financial institutions, and some large businesses (Corso 2015). Still, the government's efforts to provide the sovereign debt market with a more solid structure allowed the market to develop to the point of becoming an option for long-term saving capable of competing with the national mortgage certificate within a few years. Still, Argentine families did not participate in this market. The stock market, on the other hand (that had developed significantly during the last decade of the 19th century and the first decade of the 20th century), failed to recover from the losses suffered during the First World War and maintained a low level of activity until the second half of the 1940s (Corso 2015).

All in all, until well into the 1940s, most Argentine companies and families had their long-term and short-term savings within the national financial system. However, from 1946 onwards, with the election of Juan Domingo Peron as president of Argentina, three fundamental transformations took place, which deepened the uncertainty surrounding the value of the national currency and triggered a dramatic loss of trust that, this time, had an impact in the national financial system. The first significant transformation of these years was that, as of 1946, the national inflation rate increased steadily, reaching an unprecedented 30%. The second transformation was the disappearance of long-term saving instruments capable of storing value from the national financial system. In turn, the combination of these two processes resulted in a *repressed financial sector* (Corso 2015, 79) - that is, a financial sector in which the nominal interest rates were systematically below the inflation rate, thus the real interest rates were negative -, and triggered a flight of resources which flowed to other areas of the economy, such as, the market for durable goods and, to a lesser extent, the real estate market.

Last, the third significant transformation of these years was the re-emergence of *external constraints* (in Spanish, *restricción externa*) (Gaggero, Schorr, and Wainer 2014), that is, the lack of international reserves, a situation that would become chronic. Especially since 1949, the lack of international reserves (first gold and then later dollars), became a regular feature of the Argentine economy, which would leave an indelible mark on Argentines for many generations. The recurrent balance of payments crises caused by the chronic lack of international reserves, which were extremely frequent between the 1950s and 1960s, resulted in dramatic and recurring devaluations of the national currency, which, eventually, would end up destroying the trust of Argentines in the peso. In fact, in the

heat of the recurring monetary crises that characterized these years, the constant changes to money's value and the uncertainty surrounding the overall economy would cause Argentines to stop taking their national currency for granted. During those years, as the trust in the peso began to disappear, the US dollar would start to become the favorite reserve asset of Argentines, as well as their chosen barometer to interpret national crises. During those years, the US dollar would start to gain a prominent place within increasingly broad sectors of the Argentine population (Luzzi and Wilkis 2019).

The financial reform of 1946 and the disappearance of saving instruments

In 1946 the general Juan Domingo Perón became Argentina's president. From that moment on, the Argentine economic policy took a radical turn and focused on promoting the national industry. Indeed, during his first government, which lasted until 1952, Perón implemented an industrial policy that stressed the state's role as the primary agent promoting development. Peron's economic program had three main axes: the promotion of industry, the active construction of a welfare state,[42] and the transformation of the country's income distribution (a policy mainly oriented towards favoring the labor sector) (Ferrer 2012). In this regard, Perón's policies resulted in a profound transformation of the national growth model. While in the old model, economic growth depended on the political support of the traditional elites and national and international business people linked to agricultural production, the new model relied on mass consumption and internal demand. Thus, Peron's main political support came from the labor sector and other less-favored social groups (Gerchunoff and Llach 2003). Remarkably, in order to provide a fertile ground for the new economic policy, the new government implemented a series of measures, including two financial reforms (one in 1946, and the other in 1949), which caused dramatic changes to the national economy whose effects would be felt by generations.

Shortly after taking office, the new government approved a series of decrees, which, as a whole, drastically changed the structure of the country's monetary and financial system. Among the most significant changes introduced by the financial reform of 1946 were the

[42] Perón carried out an active policy of nationalization of companies providing public services. The list of nationalized companies includes most providers of rail and maritime transport, the telephone network, energy companies and other companies oriented to manufacturing activities (i.e., grain elevators). On this topic, see Ferrer (2012).

nationalization of the central bank,[43] the modification of its legal mandate and the establishment of its role as lender of last resort. At the same time, the reform ordered the nationalization of all bank deposits within the financial system; the channeling of financial loans towards industrial activities judged to have priority; and the regulation of interest rates by the state (Rougier 2018). The reform had dramatic consequences for the economy. Most notably, it led to a sharp increase in the national inflation rate. Between 1903 and 1944, the average annual inflation rate in Argentina had been 1.48%. However, as of 1945, the inflation rate began to accelerate and reached an alarming 30% in 1948 (Corso 2015). Thus, from the mid-1940s, inflation slowly started to become part of Argentines' everyday life, a daily problem that hit those who had fixed incomes especially hard. In addition to being a concrete everyday life experience, inflation also became a subject of academic debate, a technical problem that required scientific explanations that could provide effective solutions (Berrotarán, Rougier, and Tenewicki 2006). But in a world in which the old orthodox economic toolkit had lost effectiveness, and in which the new Keynesian economic paradigm was not fully developed, there was no clear consensus, and local experts discussed among themselves on the causes of national inflation and the best ways of fighting it.

At first, from 1943 to 1946, most experts associated the increase of the internal prices with the lack of goods caused by the trade restrictions that followed the Second World War. However, from 1947 onwards, the persistence and severity of inflation made it evident that its origins had to be traced back to the national economic dynamics. Although there is still an ongoing debate about the ultimate causes of inflation in Argentina at that time, there can be no doubt that the state's industrial policy played a crucial role. This policy resulted in a significant increase in banking credit (which grew significantly more than bank deposits during the whole period). In turn, the expansion of the monetary base fostered the rise of inflation (Rougier 2018). Thus, for economists such as Marcelo Diamand, Richard Mallon and Juan Sourrouille, the main cause of inflation was the excessive money issuance (Berrotarán, Rougier, and Tenewicki 2006). According to their vision, the industrial policy based on a massive supply of subsidized credit and loans (that is, credit and loans with negative real interest rates) to national industries, had resulted in an excess of money in circulation. The excessive money issuance led to an equivalent rise

[43] Strictly speaking, the central bank was nationalized during the last months of Edelmiro Farrel's government.

in prices[44]. In addition to the excessive money supply, the sustained increase in wages promoted by Perón's government also contributed to accelerating inflation, this time via the increase in production costs. Thus, it was the combination of both an expansionary monetary and fiscal policy, together with a sustained increase in wages that ultimately led to inflation (Rougier 2018).

However, according to the government, rising inflation was not the consequence of the expansionary monetary and fiscal policies. For the economic authorities, the increase in the inflation rate was the consequence of a supply shortage, whose origin was the decline in imports coming from European countries. In this view, rising inflation resulted from the lack of synchronization between an aggressively expansionary policy (which encouraged public spending and increased the purchasing power of the population) and an underdeveloped industrial sector (that could not increase its production to fulfill the increasing demand). In short, there was more money to spend than products to buy within the national economy. In turn, the supply shortage resulted from the combination of two factors: the difficulties in importing European products in the context of the second postwar period, and the lack of development of the local industry, which was unable to provide substitutes for those goods that could no longer be imported. Thus, the national economy suffered from supply rigidity. In August 1947, the minister of economy Miguel Miranda referred to the problem in one of his speeches:

> *"What we are doing vigorously right now is the first phase, we are building factories and installing machinery, which provide employment but do not produce goods or provide income yet. Naturally, [with this policy] we are creating a buying capacity in the population, which at the moment cannot be satisfied because consumer goods are still lacking. But as soon as our industry begins to produce, a stream of new consumer goods will flood the market. Then, the main driver of inflation will disappear. Keynesian principles support this explanation and show that excess demand is not caused by excessive monetary expansion. Instead, inflation is caused by the*

[44] After the nationalization of bank deposits, all sources of money creation were under the direct control of the state. Thus, while it was true that private banks could continue to take deposits, these entities could only lend the funds that the state made available to them. Thus, the decision on the granting of loans was ultimately taken by the monetary authorities. On this topic, see Rougier (2018).

current lack of development of our industry, where investments have not yet matured".[45]

As illustrated above, the government saw inflation as a transitory problem that resulted from a lack of manufactured goods that could satisfy the populations' increasing demand. In their view, rising inflation would stop once the economic investments promoted through the industrial policy had had enough time to mature.

Moreover, from 1946 onwards, in addition to these two factors (the monetization of the fiscal deficit and the scarcity of goods), a third source of inflation appeared: distributive struggles. Because Perón's policies improved the working class's wages, they transformed the income distribution and helped exacerbate class conflicts. During Perón's government, both the industrial elite and the working class gradually started monopolizing an increasing percentage of the national wealth. Naturally, the traditional elite and the foreign investors (whose incomes were not linked to the industry, but to agricultural production), were not willing to see their participation in the national wealth distribution diminished in favor of other social groups (Gerchunoff and Llach 2003). The result was that distribute struggles increased. Whenever the different social sectors (landowners, foreign investors, industrial leaders and workers) were unsatisfied with the outcome of wage bargaining, price controls or taxes (all policies that tended to restructure relative prices and, therefore, affected the income distribution), they tried to re-establish their income by using different strategies. These strategies included making wage claims, increasing the prices of their production, or even withholding exports to exert pressure on the government. In turn, these actions fostered distributive struggles, which then fueled inflation. Thus, inflation became one of the primary expressions of political, social, and economic conflicts among different sectors of society (Gerchunoff and Rapetti 2016).

Unfortunately, in 1946, Argentina's problems did not end with inflation. In addition to the daily experience of money's loss of value, a second problem arose: saving options in pesos disappeared from the local financial system. In fact, in 1946, the state implemented a deliberate policy of swapping saving instruments that, overall, sought to reduce interest

[45] Quotation from: Miranda Miguel (1947). "Cómo se dirigió nuestra economía y se retrasó el progreso industrial del país", in *Hechos e Ideas*. VI. 42. August. Buenos Aires; article quoted in Berrotarán, Rougier, and Tenewicki (2006, 55).

rates on the financial market. In this regard, the government implemented a series of actions, two of which had a crucial impact on the national financial system's overall dynamics and, especially, on saving strategies. One of these was the compulsory bailout of outstanding national mortgage certificates. With this policy, all national mortgage certificates were exchanged for mortgage bonds issued by the central bank, which paid an interest rate of around 2.5% a year. Thus, after sixty years of success, the government of Perón eliminated the market for national mortgage certificates, which were replaced by bonds that yielded negative real interest rates (Corso 2015). As if that was not enough, the government also ordered the compulsory exchange of public debt instruments for others with a lower yield.[46] In this regard, the financial reform of 1946 carried out a massive policy of compulsory swap of public debt instruments, which were exchanged for new instruments that yielded lower interest rates. For example, the government exchanged different national bonds that paid an interest rate between 4% and 3,5% per year for other liabilities, which paid interest rates around 3%. Something similar happened with regional and municipal bonds (Corso 2015).

As a result of these two measures, the government ended up eliminating all profitable saving options in local currency from the national financial system. To the extent that the interest rates paid by all saving options still available were below the inflation rate, the real returns of all financial assets in local currency became negative. As noted by Marcelo Rougier (2018, 193) between 1946 and 1955, all the interest rates in the national financial system (which were fixed by the state) were negative in real terms for both credit takers and savers. The combination of rising inflation and interest rates that the government intentionally maintained below the inflation level resulted in the emergence of a *repressed financial sector* (Corso 2015, 79). That is, it resulted in a financial sector whose intrinsic design systematically favors debtors; in other words, a financial sector designed to transfer resources from those who have financial wealth to those who need resources in the form of credits. In this context, the real returns of all financial assets in local currency became systematically negative. The situation eliminated the incentives for Argentines to keep their savings within the local financial system. Thus, negative returns led to an intense process of financial disintermediation. Argentines began to take their savings out

[46] As noted by Corso (2015), the nominal interest rates of all public bonds (national, regional and municipal) oscillated between 3 and 5%. In a context where the inflation rate comfortably exceeded 20% per year, these bonds yielded a negative real interest rate of at least 15 points for keeping savings in these assets.

of the national financial sector and look for other options that would allow them to preserve the value of their wealth. Naturally, since the 1950s, real estate became a popular option to maintain the real value of wealth (Corso 2015).

Short-term saving options were also affected by the policies of the early Peronist years. Deposits in the bank of the national post office, which had performed well between 1946 and 1949 and amounted to more than five million in 1949, fell dramatically. The economic crisis of 1949 pushed the volume of savings to very low levels. By 1952, the volume of deposits was barely half what it had been in 1948 (Rougier and Fiszbein 2004). Although the government was not indifferent to this fall in the general level of deposits and put in place a policy that tried to encourage small savers[47], the results of this policy were modest. Even though by 1955, short-term deposits recovered slightly, their volume never reached the levels of the first years of Perón's first government. In sum, during Perón's two governments (which lasted from 1946 to 1955), there were no financial options that allowed the Argentine people to preserve the value of their savings and wealth. Some of the few alternatives available were the purchase of durable goods and, especially, real estate investments, which started to register very high levels of demand at the time, a situation only explicable by the circumstances described (Corso 2015).

In 1946, with the rise of inflation, the monetary problems of the Argentines became even more complicated. In addition to the public debates about the value of the national currency in gold that already circulated within the national press, and which as I will show, continued, the early years of Perón's first government added the everyday experience of inflation. Thus, in 1946, Argentines began to suffer from a disease that would become dramatically familiar: the daily experience of their currency losing value, the experience that the money they had was no longer worth enough to buy what it had yesterday. Furthermore, although no one knew it at the time, that passive, pragmatic, everyday experience of money disappearing between their fingers had come to stay. So, from 1946 onwards, the Argentine's monetary problems were no longer restricted to the social debate, which appeared in the media of the time, about whether the state was

[47] From 1949 onwards, the government of Juan Domingo Perón tried to encourage saving and investment. With this aim, the government implemented education programs to promote saving in primary and secondary schools and carried out film and radio campaigns, as well as activities and talks in trade unions and factories. The government also published magazines and books on the topic. On this subject, see Rougier and Fiszbein (2004).

artificially manipulating the value of the national currency in gold. Now, the Argentine's money problems were coming close to home. Now, the loss of value of the national currency was no longer a far-away issue but a daily, personal, persistent and material experience of incomes that were not enough and of savings that were fading away. To make matters worse, there seemed to be no escape from this situation. If it was already difficult to deal with the lack of sufficient income, the disappearance of all saving options from the financial system that could allow people to preserve what they had saved, made the experience only more desperate. Over the years, the persistence of inflation convinced Argentines that the peso was no longer a valuable currency, but a paper piece that could dramatically and irreversibly lose its purchasing power.

The financial reform of 1949 and the debate about the gold reserves

The debates about money that began in 1931 continued for many years, although the topics addressed varied. Just as in 1931, the debate had focused mainly on the exchange controls recently imposed by the government of general José Félix Uriburu; in 1949, public discussions about money mainly referred to the level of gold reserves that were supposed to back up the national currency. As always, the underlying problem was the lack of gold. As I have already shown, Argentina had always suffered from balance of payments' problems and a chronic lack of reserves; a situation that since the gold standard had ended up in a row of currency crashes and long periods of inconvertibility. However, between the 1940s and 1950s, the lack of foreign currency became a chronic issue for Argentina and turned into the most critical limitation for its national development. But how did this process occur? As I will show in the following, one of the leading causes behind the increasing lack of dollars was that industrial development increased the country's need for foreign currency. At the same time, the complex international situation of a world where all currencies (except the dollar) had stopped being convertible into gold, left Argentina with few possibilities on how to pay for its imports. Thus, between 1946 and 1949, the government decided to use part of the national gold reserves to meet the country's external commitments. Faced with a situation that was not improving, in 1949, the government sent a bill to Congress that sought to reduce the percentage of gold reserves that the central bank had to have to 20% (instead of the 25% that was in force). The debate in Congress was virulent and soon became the cover story of every newspaper. The extensive media coverage was a clear indication that debates about the national

currency's value were far from settled. As Luzzi and Wilkis (2019) point out, the discussions of those years about the value of money significantly impacted the popular culture of the time. Proof of this impact is the magnitude that issues related to the country's political and economic situation acquired in different expressions of popular culture, such as graphic humor and musical theatre plays. However, without a doubt, the most enduring legacies of those years would be the increase in the economy's need for dollars and the decrease of the national gold reserves, two processes that only aggravated the country's overall economic situation. Moreover, the lack of gold and dollars became a chronic problem since 1949 and laid the foundations for the enormous macroeconomic instability that would characterize the Argentine economy until, at least, 1967. Since then, the lack of dollars became the most dramatic limitation to sustained long-term monetary stability and monetary trust.

During the first decades of the 20th century, Argentina's economic growth depended on its exports of raw materials and low-value-added agricultural products. However, with the arrival of Perón in government, Argentina's growth model gradually shifted towards a model based on a domestic industry specializing in the production of final goods. In Argentina, as in many other Latin American countries, some industrial branches were already developing by the mid-1930s. Still, in the beginning, industrial development in the country had emerged as a short-term solution, a way of dealing with the supply shortage caused by the lack of imports coming from Europe in the first half of the 20th century (Gerchunoff and Llach 2003). In contrast, in 1946, the industrial policy stopped being a short-term solution and became a deliberate state policy. Perón actively promoted the development of the national industry and a growth model driven by domestic demand. Such a model was not only more inclusive but also (it was expected to be) more sustainable in the long run. However, the late industrialization model that the Argentine economy followed between the 1940s and 1960s - which is known in the literature as *import-substitution-industrialization* (Rapoport 2010, 9)- had severe limitations. Mainly, it supported the development of an industry that demanded plenty of foreign reserves but could not produce them (Ferrer 2012).

Until the 1960s, the Argentine domestic industry was a light industry oriented towards the early-stage transformation of the agricultural production. It was an industry which produced low value-added supplies. Mostly, the industry produced non-durable

(perishable) final consumer goods for the supply of the domestic market. During the 1940s, existing industries linked to the production of food, beverages, textiles, leather and tobacco, were complemented with new branches, mostly oriented to produce glass, paper, rubber, and also household appliances, such as kitchens, radios and refrigerators (Ferrer 2012). Without a doubt, the industry contributed to national development. However, one of the most pressing problems posed by this light industry was that it was highly dependent on importing machinery, equipment and supplies from Europe and other developed countries. Moreover, since the Latin-American region rarely developed state-of-the-art technologies, productive innovation also depended on the licensing or purchasing of technology (Rapoport 2010). Thus, the Argentine industry was - due to its internal structure -, an industry that could only function as long as Argentina had sufficient gold to import the supplies that its industry required. But the problem was that the gold (or the foreign currency) necessary to sustain the industrialization process came from the country's exports, which were still overwhelmingly produced by the agricultural sector.

The Argentine industry, thus, suffered from two main problems: an economic and a socio-political one. The economic problem was that the Argentine economy had an *unbalanced productive structure* (Diamand 1972); that is, it had an economic structure with a fundamental imbalance between its agricultural and industrial sectors. This imbalance had to do with the fact that, on the one hand, Argentina exported fundamentally raw materials (such as grain and meat) and low-value-added agricultural supplies. Thus, its capacity to export was frequently affected by factors beyond the country's control (i.e., variations in the international price of agricultural commodities, or unfavorable weather conditions, etc.). In contrast, the industry required capital goods and manufactured supplies, whose prices were higher and more stable (Ferrer 2012). Because the industry was highly dependent on importing supplies, it was also dependent on foreign exchange inflows. However, Argentina's industrial production was oriented to satisfy the internal market. Therefore, it was an industry with little or no capacity to generate the necessary resources to sustain its own development. As always, the foreign exchange came from the exports of agricultural products. As a result of this dynamics between the agricultural and the industrial sectors, Argentina often suffered trade imbalances, which restricted the availability of genuine gold inflows, that is, gold inflows that did not come from international loans or foreign direct investment. Moreover, due to its characteristics,

Argentina's industrial model was frequently labeled as unsustainable. However, it must also be noticed that Argentina's industry's sustainability was also dependent on political support. In this regard, the second problem of Argentina's industrial growth model was fundamentally a socio-political one. The traditional national elites and the groups of foreign investors did not look favorably on industrial development. In fact, since these groups' incomes came from agricultural production, industrial development entailed potential economic losses for both of them. Moreover, industrial development also empowered the labor sector and other low-income groups. In this regard, elites and foreign investors often intentionally boycotted the national industry, thus preventing it from taking off (Ferrer 2012; Gerchunoff and Llach 2003).

The transformation of the national growth model that started in the 1940s also had a monetary counterpart, which, in turn, contributed to aggravate the country's trade deficit even further. Until the 1930s, the Argentine economy had worked according to a bilateral trading scheme. Until that time, the country exported its agricultural production to many European countries, especially England. From this trade, Argentina obtained gold and foreign currency, which it could then use to import the manufactured goods it needed, also from Europe. However, between the 1930s and 1940s, this bilateral scheme was gradually replaced by a commercial triangle that included not only Argentina and England, but also the United States. While in the new scheme, Argentina still exported most of its production to England and other European nations, the imports that the country needed to supply its domestic market mostly came from the United States. By 1947, half of Argentina's imports came from the dollar area (Sember 2018). Naturally, in these circumstances, Argentina needed to obtain the gold (or the dollars) to buy goods and equipment from the United States. Typically, this gold had come from Argentina's exports to England and continental Europe. But the highly complex monetary reality of the 1940s made it difficult for Argentina to sustain this triangular trading scheme. In fact, during the second postwar period, many European countries (including England, the primary buyer of Argentine meats), had suspended gold convertibility on their national currencies. Not only did England not have a gold convertible currency; even worse, it also had no real ability to pay for its imports. In this situation, Argentina could not use the pounds sterling obtained by its commercial exchange with England. The 'blocked pounds' (Rougier 2018, 159) accumulated in Argentina's central bank, but they could only be used to trade with countries within the sterling bloc. Since these pounds could not

be converted into other currencies either, Argentina found it challenging to obtain the dollars it needed to buy the goods from the United States and other countries outside the sterling area to provide its domestic economy. In 1947, the dramatic situation was described at the national press of the time:

> "*The truth is that our country makes large purchases to the United States. But for these purchases to be effective, we need to have dollars, either in the form of foreign currency reserves or in the form of dollar deposits credited in US banks. However, dollar reserves […] can only be obtained if we can sell [our products] to US merchants. We emphasize this point, especially now that the conversion of British pounds to US dollars is still a problem whose solution does not seem to be near".* [48]

Under these circumstances, the trade balance with the United States became increasingly negative. The persistent lack of dollars forced Argentina to spend a significant part of its gold reserves to pay for its imports (Rougier 2018). As a result, while in 1946, the central bank's gold reserves reached 1686 million dollars, in 1947, they fell to 1100 million dollars, and they decreased to almost half of that number in 1948 (Luzzi and Wilkis 2019). Initially, the government of Juan Domingo Perón tried to solve the problem by increasing exchange controls and restricting the imports of goods that were not considered essential, including cars, silk yarn and expensive beverages such as champagne and whiskey. But gold reserves continued to decline. Slowly running out of options, in September 1949, the national government sent to Congress a bill that intended to reform the central bank's legal mandate. Among other measures, the bill proposed to modify the relationship between the country's gold reserves and the amount of money in circulation within the national economy. The project reduced the percentage of total reserves backing the national currency to 20% (instead of the 25% in force). Moreover, because the new regulation intended to suspend the central bank's obligation to maintain sufficient gold and foreign currency reserves to cover the value of at least 25% of all pesos in circulation, it allowed the government greater liberty to manage the monetary policy. In light of the extensive and heated debate in the Chamber of Deputies, this measure was, without a

[48] Quotation from the editorial "Envío de oro a EEUU", published in June 1947 in the national newspaper *La Prensa*, cited in Luzzi and Wilkis (2019, 38).

doubt, the most controversial point of the 1949 financial reform (Rougier 2018). The then deputy (and future president) Arturo Frondizi was one of its most fierce critics:

> "*This bill includes more than 50 sections whose sole purpose is to leave our currency without its gold backup. [...] This project pursues two fundamental purposes. First, the purpose of leaving the national government hands-free to spend the little gold and foreign currency reserves the central bank has left. Second, that of leaving their hands-free to continue issuing currency without limitation of any kind".*[49]

Perón, on the other hand, pointed out that the decline of the foreign reserves was part of a national strategy aimed at promoting industrialization and improving workers' living conditions. For the president, the critical point was that Argentina used the resources it had in pursuit of achieving its economic independence:

> *"They accuse us of having no foreign currency left; they say that we suspended the import of perfumes, whiskey, silks, and luxury cars. […] But we will not take loans to obtain foreign currency. And it makes sense that those who trade with foreign currency are against us. [However] today, our currency has a backup that it lacked before. [Today] our peso is backed by 151% gold, which is an unprecedented situation in Argentina. Until we reduce that back up to 33%, as they did, we have much gold to hand over. They argue that we should not hand over the gold, and I wonder: if a period of hunger comes, will we eat the gold? […] What is the state going to do with the gold piles in the central bank? If we leave them where they are, in five years from now they will reap no benefit. Is it not better to exchange a couple of those piles for ships that will repay themselves with their freights in four years?".*[50]

The cross accusations marked the tone of the debate. Perón, on the one hand, denounced the existence of a dirty campaign aimed at discrediting the government, a campaign

[49] Quotation from Arturo Frondizi's press statements published in the newspaper *Clarín* on September 9, 1949; quoted in Luzzi and Wilkis (2019, 43).
[50] Quotation from Juan Domingo Perón speech at the signing of the agreement for food workers on June 23, 1947; quoted in Luzzi and Wilkis (2019, 39).

organized by *"those who trade with foreign currency"*, that meant by the traders working at the dollar's illegal market. *"Yes, we have no dollars, but we have vehicles and machinery"* the president said, and added that what was necessary regarding the sustainability of money's value was not the amount of gold reserves but the productive capacity of the economy:

> *"When the country has to buy or sell its production in international markets, we do not [want to] use currencies which lose their value. We buy with wheat, meat, leather, which will always have value. We do not [want to] use currencies based on a gold-standard, because those [currencies] can lose their value. We already know that game: it depends on the price of gold. [Instead] we will pay with what our land and our work produce because the value of that production will never be lost"*.[51]

However, critics did not stop. According to those who opposed the reform, the public had *"the right to know why their pesos had lost so much proportion of their value [in gold], and what future awaited the national currency"*.[52]

Finally, after 29 hours of uninterrupted debate and despite the open resistance of the legislators who opposed the government, the bill intended to reform the central bank's legal mandate was passed in the Chamber of Deputies. As Luzzi and Wilkis (2019) point out, the discussions over money that took place during those years (including the 1949 debate about the reduction of the country's gold reserves and its consequences for the value of the national currency) had a significant impact on the popular culture of the time. The political and economic debates of those years received incredible coverage by the national press. Moreover, they also inspired graphic humor and even theater plays, such as the musical piece *"El dólar esta cabrero"* (The dollar is mad/annoyed) released in 1939, or the comedy *"La Risa es la mejor divisa"* (Laughter is the best currency) released in 1949. However, the most enduring legacy of those years would be a chronic lack of dollars. Indeed, since 1949 Argentina's *external constraints* would become the fundamental limitation for the country's future development.

[51] Quotation from Juan Domingo Perón speech at the ceremony held by the Railway Union on December 19, 1949; quoted in Luzzi and Wilkis (2019, 45).
[52] Quotation from an editorial published at the newspaper *La Prensa* in September 10, 1949; cited in Luzzi and Wilkis (2019, 43). Unfortunately, the authors do not indicate the title of the article.

The crises of the Stop and Go phase and the emergence of monetary distrust (1949-1967)

From 1949 to 1967, the Argentine economy went through a phase characterized by repeated balance of payments crises known in the literature as *the Stop & Go period*. The root cause of these recurrent cycles was the country's chronic lack of foreign reserves. I already showed Argentina suffered from a lack of foreign reserves since the beginning of the 20th century. At that time, the country mainly needed gold to build infrastructure works and pay its foreign debt. However, during the 1940s, industrial development increased the country's need for dollars even further. Since the national industry required to import supplies and technology from developed countries, and these had to be paid with either gold or dollars, Argentina's need for dollars increased with industrialization. Because the industry needed dollars, whenever industrial development started to take off, the country ran into a structural shortage of foreign currency and suffered from a balance of payments crisis. Due to this economic dynamic, between 1949 and 1967, cycles of industrial expansion (1947, 1961 and 1965) alternate with periods of crises and economic recession (1950-52, 1959 and 1962-63) (Gerchunoff and Rapetti 2016). Typically, the cycle began with a boom phase, in which industrial expansion led to an increase in imports. When the lack of foreign exchange made it impossible to continue the expansionary phase, a balance of payments crisis occurred and a period of recession followed.

The recurring crises of the Stop & Go phase enlarged the list of factors driving inflation. Until 1949, this list included excessive money issuance, supply rigidity and distributive struggles. But in 1949, a new factor was added to the list: *exchange rate driven inflation*.[53] From 1949 onwards, exchange rate crises became one of the main drivers of inflation in Argentina. From the last years of Juan Domingo Perón's first presidency to the interruption of the democratic government of Arturo Illia by the military, inflation continued to be a cause of public concern and government unrest. In the search for stability, the economic authorities often implemented austerity plans. These plans generally comprised a series of measures to restore monetary and fiscal balance, including

[53] Exchange rate-driven inflation results from the increase in the cost of tradable goods caused by each devaluation of the national currency.

fiscal adjustment, currency devaluation, interest rate increases and credit restriction (Kiguel 2015). Alfredo Gómez Morales implemented the first austerity plan in 1952. Adalbert Krieger Vasena, the last one of this phase, in 1967. In between other four austerity plans were put in place. But despite the six austerity plans implemented between 1949 and 1967 (1952, 1955, 1956-57; 1959, 1962 and 1967) (see Table 2 in the following chapter), inflation continued (Gerchunoff and Llach 2003). With a crisis every three years on average, the Stop & Go period set the pace for Argentina's economic development for almost 20 years.

On top of inflation, was the political drama. In fact, between 1955 and 1973, Argentina lived through tumultuous years. No democratic government managed to finish its mandate, and the national army was in permanent confrontation with groups of armed civilians (Ferrer 2012). Moreover, during 1949 and 1967, monetary crises contributed to political unrest. In those years, Argentina suffered four mega-devaluations of its national currency and many exchange rate shocks. With each devaluation, the currency crashes' economic and social impact deepened Argentines' unrest and increased their distrust in the peso's ability to store value. With each devaluation, the real wage of the working class and other fixed-income sectors decreased further. The psychological impact of each of these crises was significant. Each movement in the exchange rate showed that the national currency's value was nothing more than an arbitrary number that moved capriciously. Without even understanding the logic behind each jump in the exchange rate, Argentines watched the changes in the peso's value like someone watching a horror movie. They were frightened and mesmerized at the same time, between the anguish of not knowing if their salary would be enough to survive that month and the fascination of those who watch a magician's spectacle trying to understand the hidden trick. During those years, the Argentine society witnessed the melting of its currency.

The first significant currency crash of the Stop & Go period occurred in 1955. At that time, the self-proclaimed 'Liberating Revolution' led by general Pedro Aramburu overthrew president Juan Domingo Perón, who ended up in exile in Spain. One of the military government's goals was to 'recover the health' of the national currency. The austerity plan began with a sharp devaluation. The system of multiple exchange rates that was in force during Peron's two governments was abolished. Instead of three different official exchange rates ($5, $7.5, and $15), the government imposed one official exchange

rate. One ‘official’ dollar costed $18. On the other hand, the government re-established the free market, where each dollar costed $36 (Rapoport 2010). The second major currency crash of this phase occurred in 1958, during the government of Arturo Frondizi. At that time, Argentina had been running a trade deficit for four years in a row. To re-establish the trade balance, the government decided to liberalize the exchange market and modified the exchange rate. The liberation of the foreign exchange market was not a minor event. It was the first time since 1931, there would be a single free exchange rate again for all economic activities (Gerchunoff and Llach 2003). To give time for the drafting and the communication of the new regulations, Frondizi enforced a twelve-day holiday. The day after the activity resumed in the exchange market, the press reported in its cover stories how crowdings of people had flooded the San Martín Street, the privileged setting for exchange houses in Buenos Aires (Luzzi and Wilkis 2019). In the course of a few days, the dollar appreciated 68.2% against the peso. The third significant devaluation occurred during the presidency of José Guido in April 1962. Federico Pinedo, who was again minister of economy, forced the central bank to withdraw its interventions and the dollar appreciated by 64.5% (Odisio 2018). Finally, in March 1967, the (de facto) government of general Juan Carlos Onganía, announced (what was intended to be) ‘the last great devaluation’ of the national currency. The exchange rate jump rose the dollar from $290 to $350. The government’s optimism at the time in its ability to put an end to the exchange rate crises hardly allowed it to see that Argentina’s monetary problems were about to become even more dramatic.

In 1955, the dollar’s value rose from $5 to $18 within a few days. In 1958, from $48 to $80, and in 1962 from $83 to $154. All of these crises had significant psychological effects. Each devaluation was a stark demonstration that the currency’s value was a convention. Each crisis showed that money was no more than an accounting instrument with no intrinsic value outside its state guarantee. To make matters worse, each jump in the exchange rate impacted the national inflation rate. Thus, inflation increased, undermining even further Argentines’ purchasing power. The state that was supposed to guarantee the currency’s value seemed to be as baffled as the citizens themselves. All the governments - from Perón (1952) to the (de facto) government of Pedro Aramburu (1956), to the government of Frondizi (1959) and the government of Guido (1962) -, implemented austerity plans, that sought to reestablish economic equilibrium. All these plans included abrupt devaluations, among other dramatic measures. But not only the

plans did not help to reestablish economic equilibrium, but they also produced incredibly traumatic blows that evaporated the already damaged trust of Argentines in the peso. Each one of these devaluations was a demonstration of the conventional and contingent nature of money's value.

The dollarization of savings and the early popularization of the dollar in Argentina (1950-1970)

The Stop and Go crises caused Argentines to lose trust in the enduring value of the peso. Crucially, this loss of trust was accompanied by a second process: the beginning of savings dollarization. The monetary world of the 1950s and 1960s was a world in which the value of all capitalist credit currencies was inextricably linked to the value of the dollar. Thus, worldwide the dollar had become money's measure of value. Unsurprisingly, in Argentina, the dollar also became an instrument for interpreting and measuring the national currency's loss of value. During this time, two processes took place. First, Argentines started to save in dollars. Second, the dollar also started to be used as a unit of account, a reference to measure and quantify the losses caused by each monetary crisis.

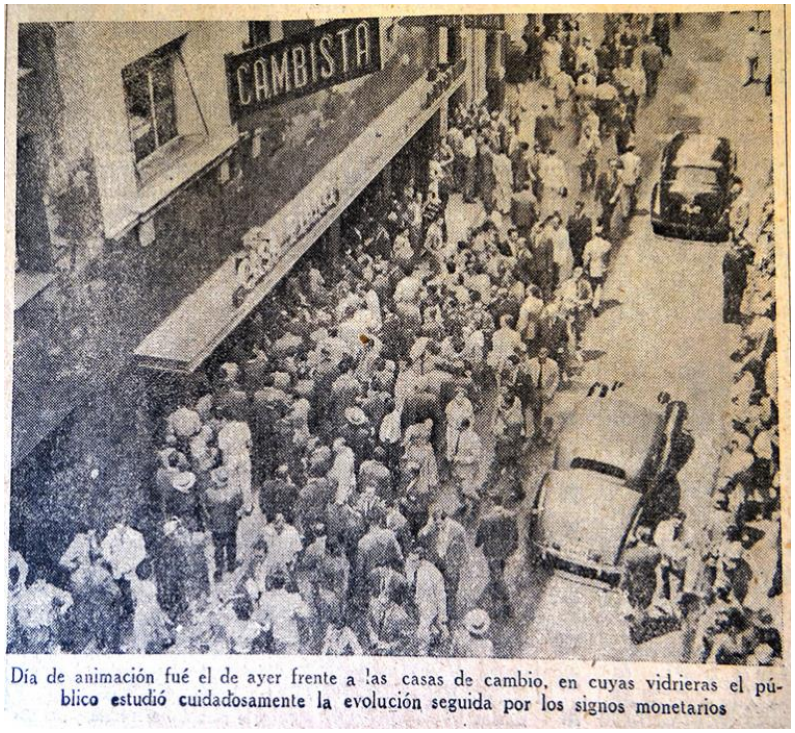
There is not much research on the early beginnings of dollarization in Argentina. However, few studies show (Corso 2015; Luzzi and Wilkis 2019) that in 1957 the dollarization of Argentines' savings was already underway. In fact, in 1957, the central bank authorized banks to take deposits in dollars for the first time. Thus, several financial entities began to promote investments in foreign currency as a strategy to preserve savings in pesos from the loss of value caused by the recurrent crises. As noted by Luzzi and Wilkis (2019), by 1957, advertisements on dollar investments had already started to appear in the national press. In a financial system where there were no saving options in domestic currency, it is not surprising that dollar deposits became increasingly frequent. Moreover, the archives of the Argentine stock market also show that, between 1958 and 1959, financial investments in dollars were growing.[54] Other investments also started to gain popularity, such as purchasing real state or durable goods, including cars.

[54] I thank Eduardo Corso for pointing out this fact during an interview.

The material dollarization of savings was accompanied by symbolic dollarization. Since the 1950s, the US dollar became a guide, an instrument that the public could use to understand their economic surroundings. The dollar (used as a unit of account) started to orient Argentines cognitively and practically amid so many crises. The *popularization of the dollar* (Luzzi and Wilkis 2019) and its status as a *public number* (Daniel 2013) capable of helping Argentines understand their national economic reality is evident in the national press of the time. As Luzzi and Wilkis (2019) show, since the early 1950s, the US currency gained more and more pre-eminence in the national press and became the principal reference value for understanding the national economy. The frequent exchange rate crises began to occupy an increasingly prominent place on the newspapers' front pages. And so did the US dollar. The use of images and easy language by the press contributed to making the dollar a reference for many who, until then, had had little contact with the financial and foreign exchange markets.

Thus, during the 1950s and 1960s, the US currency reached broader sectors of the Argentine population. In every crisis, newspapers reproduced images of the crowds gathered in front of the exchange houses' windows in downtown Buenos Aires. The pictures showed citizens anxious to know the value of the US currency and to be able to make transactions (see image 2). These images made the dollar market more visible and easier to understand. They put a face to an activity that, until then, had only been associated with large import or export transactions and with the world of banks. In this period, the exchange rate would start to be announced daily in national newspapers, a practice that still exists today. Naturally, the press contributed to making the practice of hoarding dollars increasingly visible. Moreover, it helped the dollar becoming an 'object of the popular culture' (Luzzi and Wilkis 2019). As mentioned, this was the moment when the preference of Argentines for saving in dollars started to be portrayed in graphic humor and theater plays.

Image 2
The public gathered in front of the exchange houses on the day the exchange market reopened during the presidency of Arturo Frondizi (1959)



Source: Illustration that appeared in the newspaper *La Nación*, on January 13, 1959. Illustrated in Luzzi and Wilkis (2017).

Aside from becoming an increasingly standard option for keeping savings, and a public number capable of orienting Argentines amid so many crises, the US dollar also became a unit of account to calculate losses and profits. In an economic environment enormously complex and dramatically changing, the dollar became a source of stability. As the peso's inability to provide a reference of value increased, more and more companies started to promote the dollar as a reference price. At that time, transactions were still made in pesos. But in an environment where the recurrent crises had wholly distorted the system of equivalences, people were increasingly lost. Thus, companies started to promote the use of the US dollar as a price to calculate profits. From the purchase of real state and land to the purchase of plane tickets to travel abroad, more and more companies advertised their prices in dollars. For example, in December 1958, the construction company Geofinca S.A. published the following advertisement:

"You and the dollar are intimately connected through the value of the Argentine peso. When the dollar costed $30, you could buy much land for

> *only $60 a month. But now [...] you and the peso have lost purchasing power. Now, the same piece of land costs $170 a month. If inflation keeps rising at the actual pace, shortly $170 will also be a meager price. So, what should you do? [...] Buy land. The land is the only effective way to save your money from devaluation".*[55]

During the late 1950s, real estate investments started to be a typical store of value in Argentina. Many apartments were built in seaside cities close to Buenos Aires and became an alternative to store wealth in a context where there were no real saving options in the financial system (Corso 2015). Besides an instrument to calculate profits, the dollar also became a measure to quantify the harmful effects of inflation and the loss of value of the national currency. Besides the advertisements that intended to help Argentines calculate prices, newspapers started to compare the prices of some mass consumption products (such as beef) to the dollar's price. For example, during 1958 and 1959, for several months, the newspaper Clarín (one of Argentina's most influential newspapers) illustrated the price increase in mass consumption products compared to the prices of beef and the dollar (see image 3). In a box for outstanding news, the newspaper stated the following:

> *"Beef – U$S. In Buenos Aires, the price of one kilo of meat competes with the price of the dollar. Meet closed yesterday in the butchery at $60. The dollar closed in exchange houses at $67.30. The price of meet rose $30, while the dollar price only rose $4.60 in the last 48 hours".*[56]

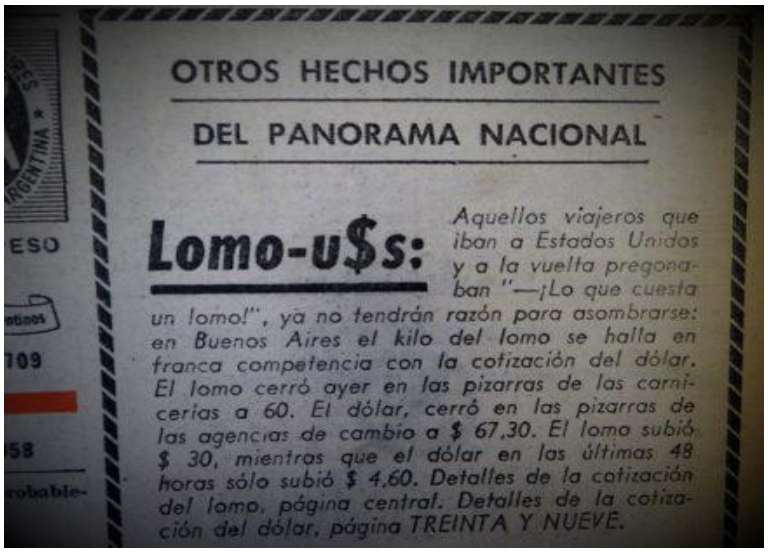
Thus, in a context that made it difficult for Argentines to keep track of prices, the dollar became an instrument that helped to quantify and measure the dramatic effects of inflation and currency crashes.

[55]Quotation from an advertisement made by the construction company Geofinca S. A.. The announcement occupied a full page in the December 18, 1958 edition of the newspaper *Clarín*. The company (which had branches in different cities of Argentina) promoted the sale of land in the coastal city of Mar del Plata. Cited in Luzzi and Wilkis (2019, 77)

[56] Quotation from the December 17, 1958 edition of the newspaper *Clarín*. Cited in Luzzi and Wilkis (2019, 75).

Image 3

Comparison between the price of beef and that of the US dollar that appeared on the cover of the newspaper Clarín (1958).



OTROS HECHOS IMPORTANTES

DEL PANORAMA NACIONAL

Lomo-u$s: *Aquellos viajeros que iban a Estados Unidos y a la vuelta pregonaban "—¡Lo que cuesta un lomo!", ya no tendrán razón para asombrarse: en Buenos Aires el kilo del lomo se halla en franca competencia con la cotización del dólar. El lomo cerró ayer en las pizarras de las carnicerías a 60. El dólar, cerró en las pizarras de las agencias de cambio a $ 67,30. El lomo subió $ 30, mientras que el dólar en las últimas 48 horas sólo subió $ 4,60. Detalles de la cotización del lomo, página central. Detalles de la cotización del dólar, página TREINTA Y NUEVE.*

Source: Comparison between the prices of beef and the dollar that appeared in the newspaper *Clarín*, on the cover of its December 17, 1958 edition. Illustrated in Luzzi and Wilkis (2017).

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Argentina established its national currency in 1883. Until well into the 1940s, the state could guarantee money's value in gold and sustain a reliable currency. Until 1946 Argentines trusted their currency. However, in 1946, Argentina's growth model changed sharply. Industrial development and the rise of the working class transformed the Argentine monetary landscape forever. From that moment on, inflation increased steadily. In a context where saving options in pesos were no longer profitable, Argentines started to take their savings out of the financial system. At first, they invested them in real estate and durable goods. By the 1950s, the US dollar (which had become the world's reserve currency) started to be regarded as an excellent option to store local savings. Over time, the dollar also became a unit of account to measure the effects of crises. Since 1949, Argentina's balance of payments problems became more severe. Even if Argentina had suffered from a chronic lack of foreign currency reserves since 1880, from 1945 on, the country's need for dollars increased. Argentina's external constraints increased with industrialization. Thus, currency crises started to be more frequent and severe. During the 1970s and the 1980s, the lack of dollars would increase even further. Macroeconomic instability would also increase dramatically in the decades to come.

5. (Dis)believing money: the consolidation of currency distrust in Argentina (1970-2010)

The day before I left for Brussels, in June 1976, I went to a travel agency to convert into dollars all the pesos […] I had obtained earlier that day from the sale of my car and some other trifles. I remember that the line at the counter was very long, and no matter how fast the cashier rushed, the price of the dollar was moving faster than his fingers when counting the bills. Behind that little gray man with a mustache […], there was another man, thinner and more agile, who was holding a telephone tightly between his jaw and his shoulder, while with his other hand, he turned a crank to change the dollar price on the sign. As the queue stepped forward, the value of the bills I had in my pockets vanished like the dew at sunrise.

With the dollars I got that day, I was able to survive a few months in a community house we rented with some friends near the European economic community building in Brussels. […] After some time, I went to France, and for seven years, I counted inflation in pennies. It was a new world for me. I adapted quickly because my life in Argentina with galloping inflation had only lasted a few months. The shock was when I returned.

In 1985, in Buenos Aires, it was no longer possible to buy anything at night at the same price as in the morning. In the cafés, the cashier went crazy between the customers' orders and the demands of his boss, who listened to inflation rates broadcast on the radio. Rents, salaries, the whole of life was - still is - indexed. Our pockets were filled with shabby, worn banknotes, in which the face of general San Martin was lost between people's messages of love, insults, and requests for help. […] [Back then] wallets were not a good gift for anyone. There was no room in their pockets to store the banknotes of 100,000, 500,000, and one million pesos.

[…] In the 1960s, the inflation rate in Argentina was as it is now in Uruguay and Venezuela, between 30% and 40% per year. Seen from today, that was not inflation. […] [Today] all Argentines are small or large investors who are used to putting their money for only seven days in a bank to make an interest. [...] Huge masses of money are routinely deposited for a single night, between the closing and the opening of the banks. [...] Distracted savers [who do not take precautions] are left with useless paper in their hands. However, this is also a part of the inflation culture. […] As I write this article, the price of the cigarettes I smoke in front of the computer had increased from $11 to $13 to $14. This movement does not worry me, because I know it is inevitable. […] [Today in Argentina] nobody agrees on the price of a service or a contract in australes, but in dollars. […] We

cohabit with inflation as with the landscape. The businessman [...] no longer thinks about reinvesting. Today, the only good businesses are those that allow you to make money right away. […]

With the presidential and legislative elections of May 1989 in sight, the government has declared once again its intentions to lower inflation. However, the truth is that the printers at the Mint do not stop.[57]

The early fight against inflation (1946-1973)

In the early 1970s, Argentine economic policymakers had two central concerns: the relentless rise in inflation and the remarkable macroeconomic instability that had been hurting the country for the past twenty years. Argentines had been living with inflation since 1946. Currency crashes were frequent since 1949. By 1970, both inflation and crises were long-standing problems. In such circumstances, one could think the economic authorities only needed to apply well-known methods to bring about long-awaited price stability. However, despite multiple attempts to stabilize the economy, anti-inflation policies had not produced the desired results (Heredia 2015). By 1967 six anti-inflation plans had already been put in place. Alfredo Gómez Morales had implemented the first plan in 1952. Adalbert Krieger Varsena, the last one (until that date) in 1967 (see table 3). But although the different governments had been tirelessly fighting the uncontrollable rise in prices, in 1970, inflation remained unharmed.

To make matters worse, the problems of the Argentines did not end with inflation. On top of the economic drama was political chaos. Since 1955, while a succession of de facto governments overthrown the ones rightfully elected by the people, the country had been immersed in violence. Between 1955 and 1973, Argentina lived through tumultuous years of political unrest and economic turmoil. In this period, three democratic governments were interrupted by four dictatorships. The democratic governments of Arturo Frondizi (1958), José María Guido (1962) and Arturo Illia (1963), were overthrown by the dictatorships of Pedro Aramburu (1955), Juan Carlos Onganía (1966), Roberto Levingston (1970), and Alejandro Lanusse (1971). In this period, the Peronist party was outlawed. Thus, the working-class demands that in the past had been voiced

[57] Fragment from Soriano, Osvaldo. 1989. "Vivir con la inflación." *Nueva Sociedad* 100: 38-43.

through democratic channels were now put forward through all kinds of violent acts, including factory boycotts, armed clashes and clandestine kidnappings (Gerchunoff and Llach 2003). Thus, while inflation continued to hurt Argentines' pockets, the enormous political instability and the exacerbated social conflict became the second hallmark of those years.

Since 1952, all governments had made considerable efforts to eradicate inflation. However, they had not always used the same recipes. Indeed, during the 1950s and 1960s, debates about which were inflation's primary drivers and potential solutions were already commonplace. Worldwide, economists had been discussing inflation since at least the 1920s, when a set of deep hyperinflations had flourished in inter-war Europe (Williamson 1985). In the Latin American region, debates about inflation began in the second half of the 1940s. In those years, the acceleration of price rises in Chile and Argentina started to be regarded as a problem by local scholars and politicians. During the 1950s and 1960s, the debate grew in importance when inflation spread to other Latin American economies, including those of Perú, Brazil and Mexico (Fairlie 1992). The worsening and diffusion of inflation to a larger area encouraged the search for more general explanations and policy instruments to help governments combat spiraling prices.[58] Over time, the debate polarized between two leading positions that proposed different explanations of inflation and the mechanisms that helped it disseminate within an economy. Naturally, these different views also led to different solutions on how governments should fight inflation.

On the one hand, a group of scholars who mostly came from economic orthodoxy offered a *monetarist* explanation of the phenomenon. On the other, there was a second group of economists, who were linked to the Economic Commission for Latin America and the Caribbean (a regional commission of the United Nations that, at the time, was directed by Raúl Prebisch), and offered a *structuralist* explanation of inflation (Cáceres and Jiménez 1983). Economists favoring the monetarist position emphasized the relationship between a rising inflation rate and the quantity of money in circulation within an economy. In their view, the most frequent driver of inflation was an expansionary monetary policy. Monetarist economists argued that if the state's fiscal deficit was too large so that it had to be financed through increasing money issuance, such a policy tended to foster inflation.

[58] On this debate, see, for example, Dornbusch and Fischer (1986); Hirschman (1981); Noyola-Vásquez (1957); Anibal Pinto (1963); Aníbal Pinto (1968); Sargent (1982); Williamson (1985).

Thus, from this perspective, inflation was primarily a consequence of irresponsible short-term economic policies on the part of policymakers (Parkin 2017). In stark contrast, structuralist economists gave little weight to monetary factors in explaining inflation. Their main argument was that inflation in Latin American countries resulted from imbalances in their economic structures. Thus, asymmetries between the industrial and the agricultural sector were responsible for creating supply-side imbalances that eventually led to a balance of payments crisis. As a result, within these economies, attempts to grow always ended up in currency crises that fostered inflation. For structuralist scholars, distributive struggles were another primary source of inflation within Latin American economies (Rodríguez 2006).

Table 3
Stabilization plans and anti-inflation policies in Argentina between 1952 and 2001

Year	Stabilization Plan	Details
1952	*Plan quinquenal* (5 years plan). Economic plan led by minister Alfredo Gómez Morales during the second government of Juan Domingo Perón	The plan included several fiscal and monetary measures oriented towards containing inflation. The most important ones were the imposition of wage freezes and price controls, the elimination of subsidies, and the promotion of savings. The government also tried to promote agricultural exports to re-establish the trade balance.
1955-57	Stabilization plan imposed by the (de facto) government of general Pedro Aramburu	The austerity policy began in 1955 with a sharp currency devaluation that brought the price of the dollar to a single official exchange rate of $18. Price controls were eliminated. Argentina signed the Bretton Woods agreements and became a member of the IMF and the World Bank. On August 2, 1956, the government implemented a financial reform. The reform denationalized all bank deposits, limited monetary expansion, and reduced domestic credit. Deposits in dollars were allowed. The central bank's legal mandate was modified. The entity became independent. Also, it was established that the monetary authorities would be in office for seven years.
1958-59	Stabilization Plan led by minister Emilio del Carril during the government of Arturo Frondizi	The plan included measures to lower the fiscal deficit, curb rising inflation, and stabilize the exchange rate. The most important measures were: the increase of taxes, the elimination of import controls, and the suspension of pension payments. Also, the foreign currency market was unified and liberalized. The government put in place a floating exchange rate regime. The liberalization of the exchange rate caused a sharp devaluation, and the price of the dollar rose from $48 to $80. Argentina signed an agreement with the IMF to receive financial aid.
1962	Stabilization Plan led by minister Alvaro Alsogaray during the government of José María Guido	In a context of extreme political instability, the government implemented drastic adjustment measures. The foreign exchange market was liberalized. The central bank was not allowed to intervene. As a consequence, the currency devalued sharply. The dollar rose from $83 to $154 in a few weeks.

1967	Stabilization Plan led by minister Adalbert Krieger Varsena during the (de facto) government of general Juan Carlos Onganía	The austerity policy included several measures to contain inflation and reduce the fiscal deficit. Among them, the government devalued the currency around 40%, rose interest rates, and froze prices (including wages, public tariffs fuel prices). The government also deregulated the economy to promote foreign investment and signed an agreement with the IMF to access a foreign loan.
1973-1974	Stabilization Plan led by minister José Ber Gelbard during the third government of Juan Domingo Perón	The plan was based on a heterodox diagnosis of inflation. Gelbard blamed the distributive struggles for price increases. The measures he launched included: wage increases for workers, price freezes. The government also sought to increase industrial exports and contribute to the development of a sustainable industry. The central bank retook its place as lender of last resort.
1975	*Rodrigazo.* Austerity policy put in place by minister Celestino Rodrigo during the government of 'Isabel' Perón	Shock therapy. Rodrigo implemented a sharp devaluation of the national currency of around 150%. He also increased the prices of fuel, gas and electricity. Price controls were abolished, and all other prices in the economy were liberalized.
1976-1977	I Stabilization Plan led by minister José Alfredo Martínez de Hoz during the (de facto) government of general Jorge Rafael Videla	The orthodox adjustment plan included a devaluation, the release of process, wage freeze, dismantling of tariff protections, and a financial reform (1977) that fostered massive speculation. The financial reform deregulated interest rates and encouraged speculation and debt in dollars. Until December 1978, the government implemented a traditional monetarist policy based on the control of monetary aggregates.
1978-1981	*Tablita cambiaria.* II Stabilization Plan led by minister José Alfredo Martínez de Hoz during the (de facto) government of general Jorge Rafael Videla	In December 1978, the government imposed a crawling peg. The plan (nicknamed the tablita cambiaria) consisted of a calendar of scheduled devaluations. Since the devaluations were lower than the inflation rate, the exchange rate was delayed, and Argentina became very expensive in dollars. The policy gravely harmed the national industry.
1981	Stabilization Plan led by minister Lorenzo Sigaut during the (de facto) government of general Roberto Viola	The tablita was abandoned. A succession of devaluations occurred. The government split the foreign exchange market and imposed tariffs to protect the industry. The state agreed to pay the foreign debt of the private sector (thus private debt was nationalized). For this, the central bank extended exchange-rate insurances.
1981-1982	Stabilization Plan led by minister Roberto Alemann during the (de facto) government of general Leopoldo Galtieri	Roberto Alemann implemented liberal policies once again. He deregulated the foreign exchange market and abolished protections to the national industry again.
1982-1983	Stabilization Plan led by ministers José Dagnino Pastore and Jorge Wehbe during the (de facto) government of general Reynaldo Bignone	The most important policy of the two ministers was that they nationalized the debt of the private sector (a process that had begun with Sigaut). The most critical measures took place when Dagnino Pastore was the minister and Domingo Cavallo, the president of the central bank.
1982-1985	Stabilization Plan led by minister Bernardo Grinspun during the government of Raúl Alfonsín	Grinspun's initial economic plan was based on increasing public spending to foster credit and keep employment high. Grinspun increased wages and imposed price controls. It also tried to control the exchange rate and public' tariffs from rising. However, because these policies did not work, Grinspun had to change his strategy. The minister then relied on conventional anti-

		inflation instruments: he devalued the currency, increased public tariffs, and decreased money issuance. He also cut public spending (especially salaries, pensions and overall state spending).
1985-1986	*Plan Austral.* I Stabilization Plan led by minister Juan Sourrouille during the government of Raúl Alfonsín	The plan included various measures to combat spiraling prices. Most importantly, the plan included a monetary reform that replaced the peso with a new currency: the austral. Also, the government raised tax revenues, rationalized expenditures, slowed down monetary emission, and resorted only to financing provided by an IMF loan. Proces were frozen. The government also forbade indexation and designed a complex system of deindexation for contracts. It also promoted industrial exports.
1986	*Australito*. II Stabilization Plan led by minister Juan Sourrouille during the government of Raúl Alfonsín	The Australito was an austerity plan that included different measures, among them: a generalized tax increase, restriction of money emission, and elimination of state subsidies. Many prices were frozen. There was also an unsuccessful attempt to privatize state-owned companies, such as the railway company, the state airline, and the telephone network provider.
1987	*Plan Primavera*. III Stabilization Plan led by minister Juan Sourrouille during the government of Raúl Alfonsín	The Primavera plan was an austerity plan, an orthodox economic plan. The plan encouraged the opening of the economy and the privatization of state-owned enterprises. Most measures were part of the usual toolkit: wage freezing, currency devaluation. The measures were not supported, and inflation soared, reaching hyperinflation.
1991-2001	*Plan de Convertibilidad* Stabilization Plan led by minister Domingo Cavallo during the government of Carlos Menem	The convertibility plan was a currency board. It was implemented through the Law 23,928 of convertibility of the austral. The plan re-established the peso as the national currency and eliminated the austral. The policy established a fixed pegging of one-to-one parity between the peso and the US dollar. It also guaranteed the full convertibility of pesos into US dollars. The government's goal was to re-establish local and international credibility in the peg and to ensure tight control of the monetary and fiscal policy. Since the convertibility law established that any adjustments of the exchange rate had to be decided at the congress, the central bank was no longer in charge of the monetary policy.

Source: Own elaboration based on Ferrer (2012); Fundación de Investigaciones Económicas Latinoamericanas (1989); Gahn (2016); Gerchunoff and Llach (2003); Kiguel (2015); Rapoport (2010); Vitelli (2004).

An essential difference between structuralist and monetarist economists was the role given to fiscal deficits. Monetarists argued that inflation resulted from a disproportionately large fiscal deficit of the country, which had to be financed through money issuance. In this regard, they often encouraged foreign debt accumulation to counteract the excessive emission of money. Structuralist economists, on the other hand, looked favorably on public spending. From their standpoint, the state had a pre-eminent role in creating mechanisms that could help these economies overcome their imbalances.

Thus, public spending was both necessary and desirable because it could help reduce disparities between different economic sectors, between different social groups and between cities and the countryside. Consequently, many structuralist economists argued that inflation resulting from deficit financing through monetary emission was a necessary compensation, a price to be paid in the present in exchange for sustainable future development (Cáceres and Jiménez 1983). Moreover, structuralist economists also stressed the role of expectations and inflationary inertia. Especially during the 1980s, structuralists made essential contributions to the fight against inflation and designed several anti-inflation plans that were mostly oriented towards managing the public's expectations on future prices (Williamson 1985).

So overall, already in the 1950s and 1960s, inflation was a contested topic. Accordingly, there were anti-inflation plans closer to the structuralist view (i.e., the plan implemented by Gómez Morales in 1952), and others that had more in common with monetarist ideas (i.e., the plan implemented by Álvaro Alsogaray in 1962). Most democratic governments, for example, promoted heterodox policies that relied heavily on public spending. These governments mostly shared the vision of an industrial and inclusive Argentina, a vision that had fully emerged in 1946, during Perón's first government. This vision found an echo in the developmental governments of the 1950s and 1960s. Thus, the governments of Arturo Frondizi and Arturo Illia, supported by both the industrial elite and the great mass of workers, sought to promote an industrial and more inclusive growth model. In the few years of democracy that Argentina had between 1958 and 1970, the developmental governments bet on industrial development. Therefore, they took an active role in promoting the creation of a technologically advanced industrial sector and encouraged the expansion of new and more sustainable industrial branches, such as the steel, petroleum and chemical industries (Gerchunoff and Llach 2003). Admittedly, these governments' main aim was to create a more sustainable national industry, which could gradually generate the foreign exchange it needed to sustain its own development.

In contrast, most de facto governments implemented liberal economic policies intended to weaken the national industry and favor a return to a less diversified economic structure (Azpiazu, Basualdo, and Khavisse 2004; Rapoport and Guiñazú 2016). In this regard, it is no coincidence that most military governments were often politically supported by the traditional local elites who envisioned an Argentina mainly oriented towards agricultural

production. Thus, more often than not, de facto governments put in place anti-inflation policies that sought to reduce the real wage of the working sectors. Typically this goal was achieved through a combination of sharp devaluations that were accompanied by wage freezes. Political repression facilitated the imposition of such policies. Interestingly, the return of Juan Domingo Perón in 1973, after almost 20 years of exile, seemed to be a signal that the moment had come for Argentina to embrace a growth model based on industrial development. However, in 1974, the death of Perón and the political turmoil which followed were the first signs that Argentines still had to fight the last major battle to decide which would be the country's political project (Ferrer 2012).

Beyond their different orientations, all anti-inflation plans carried out in Argentina between 1952 and 1967 failed to control inflation. Even if most of them were relatively successful in the short-term, they all failed in their final attempt to stabilize the economy in the long-term (Ferrer 2012). Many of these plans were initially able to contain inflation for a while and reestablish economic equilibrium. However, the equilibrium was precarious and lasted only a few months. Sooner or later, something triggered a movement in relative prices, and the inflationary spiral began once again. At times, the cause behind the reappearance of inflation were cost increases. Other times, it was distributive struggles, currency crashes, supply shortages, or excessive money issuance. But no matter what the cause was that triggered a new rise in prices, once inflation reappeared, all the other factors contributed to fuel it.

By the early 1970s, Argentina had already tried every method known to bring inflation down. From monetary tightening to price controls and wage freezes, local policymakers had tested it all. But the rise in prices seemed unbeatable. Over time, no matter their ideological and theoretical preferences, most Argentine economists started to disbelieve in both the applicability and the effectiveness of orthodox and heterodox recipes alike (Heredia 2015). Moreover, even if some measures were still regarded as potentially helpful (such as price controls or fiscal and monetary tightening), Argentine policymakers new none of them would be supported long enough to achieve long-lasting results. Against the Argentine leaders' perplexity, the world did not have an effective and universal treatment against inflation to prescribe. The 1970s, and especially the 1980s, were decades of significant disorientation and confusion on how to combat inflation. In Argentina and all over the world, there were heated debates on the causes behind inflation

and the best ways to fight against it (Williamson 1985). Certainly, with time, monetarist discourses gained strength and became more and more common. However, to the extent that most tools within the traditional monetarist policy toolkit had already been tried out without success, local economic policymakers started to test new and more radical strategies to combat the rise in prices.

The debate between competing monetarist and structuralist theories of inflation was not closed in 1971 when inflation started to increase even further (Llach 1988). Between 1945 and 1971, the country's rate of inflation had remained around 30% a year. But in 1971, due to the increase in the international prices of meat and oil, inflation escalated to 60% a year (Gerchunoff and Llach 2003). As if that was not enough, in 1975, Argentina's inflation reached triple digits, thus inaugurating two decades of high inflation. In bewilderment, politicians and policymakers witnessed the galloping rise in prices reached triple digits in 1975 and kept wondering how to stop it. Since that moment onwards, the persistence of inflation encouraged the search for ever bolder solutions. As debates between monetarists and structuralists became progressively more antagonistic, Argentina's anti-inflation policies became more and more drastic. In the heat of the debates between monetarist and structuralist economists, Argentina became a testing ground for radical experiments in inflation (Heredia 2015). During the 1970s and 1980s, monetarist and structuralist attempts to battle inflation followed one another in an endless succession of failures, which only served to increase public mistrust and political unrest. Paradoxically, each failed attempt to bring inflation down made it more resistant and immune to the policies in place. With each failure, the antagonism between orthodox and heterodox economists grew even further. Society's mistrust in policymakers' capability to stabilize the national currency's value also increased with each unsuccessful attempt to control spiraling prices.

Thus, even if Argentine anti-inflation policies had already experienced sharp turns since 1952, these turns became more radical over time. As stated before, the political and ideological fracture within the country also contributed to fuel economic chaos. Competing definitions on how to fight inflation were not the only factor that impacted policymakers and their decisions on which anti-inflation policies should be applied. On many occasions, the sudden shifts and turns in the anti-inflation policy were also a symptom of the conflicts between the ruling elites (Rapoport 2010). Frequently, the

sudden changes in the anti-inflation policy reflected the social and political fractures in national society. On several occasions, the antagonism between two contrasting political visions of Argentina resulted in abrupt shifts in the country's economic policy. In the following, I will delve deep into the succession of anti-inflation policies implemented in Argentina between 1975 and 2001. I will show how, instead of solving the Argentine's monetary problems, the endless sequence of failed anti-inflation policies only worsen them. Indeed, the unhealthy succession of anti-inflation plans and austerity policies only fostered distrust in the governments' ability to control inflation. At the same time, it contributed to uncovering the conventional contingent and hierarchical nature of money's value.

Living with high inflation (1973-1976)

In 1973, after more than a decade of exile, Juan Domingo Perón returned to the country. The restoration of Peronism to the national political landscape brought along winds of hope. After winning the elections, an aged and sick Perón dedicated entirely to fighting the evil he had created back in 1946. Perón's minister of finance, José Ber Gelbard, was convinced that the real root causes of inflation were the exacerbated social conflict and the constant distributive struggles between workers and price setters. Thus, right after taking office, he set in motion a heterodox anti-inflation program that, above all, called for social agreement. Gelbard increased wages, froze prices and sought to promote industrial exports (Ferrer 2012). In the beginning, the plan was successful. But in the inflationary international landscape of 1973, the rise in the price of oil impacted the costs of industrial supplies and led many Argentine companies to raise their prices. Ironic, that a country specialized in producing inflation was forced, this time, to import it. But that is how it was. After a few months of initial success, prices in the country started to increase once again. The social pact was broken. Within a few months, the inflation rate reached 40%. It was the beginning of the end (Gerchunoff and Llach 2003).

The death of Perón followed the failure of the Gelbard plan. After the leader's passing, his widow - María Estela Martínez de Perón (alias Isabel) -, took over the presidency. But since the new president lacked the skills to lead an unruly Argentina, the country was thrown into economic and political chaos. The rapid acceleration of the crisis makes it difficult (and perhaps useless) to describe the events that followed in detail. Suffice it to

say that, in the twenty months that 'Isabel' was in government, Argentina had six different ministers of finance: José Gelbard, Alfredo Gómez Morales, Celestino Rodrigo, Pedro Bonanni, Antonio Cafiero and Emilio Mondelli. Except for Gelbard (who was in office for almost two years), the others remained in office for about one hundred days each. Aside from modest economic growth, which lasted until early 1975, all the other economic indexes portrayed the bleak picture of that time (Gerchunoff and Llach 2003). While two antagonistic groups were fighting to gain influence over Perón's widow at the presidential level, the country's economic policy fluctuated wildly from one end to the other. In the ministry of finance, the changes in names and policies followed the violent political struggles at the core of the government. While the government was tearing itself apart, the liberal and more conservative sectors of the Argentine society began to plan a new military coup, which finally occurred on March 24, 1976.

The most dramatic experience that preceded the 1976 military coup was the traumatic austerity policy put in place by one of 'Isabel's' ministers of finance: Celestino Rodrigo. Rodrigo's anti-inflation plan's unparalleled violence earned him a prominent place in the collective memory of Argentines. The *Rodrigazo* (the Rodrigo stroke) marked a before and after in the history of Argentine inflation. Although, in essence, the plan was, once again, a devaluation of the national currency in response to a balance of payments crisis, its magnitude was unprecedented (Kiguel 2015). The plan (announced by Rodrigo on June 2, 1975) was conceived as a 'shock therapy', a package of measures that included a devaluation of the national currency of 150%, as well as sharp increases in the prices of all national public services (including transport, gas and electricity). The policy also eliminated existent price controls. Thus, it led to a sharp increase in all prices (Restivo and Dellatorre 2005). The effects of the plan were immediate. In just a few days, the inflation rate reached an unprecedented 300%. For the trade unions, which had just negotiated wage increases of 38%, the announcement was a declaration of war.

When the president confirmed that the unions' demands would not be met, the country came to a standstill (Gerchunoff and Llach 2003). The mass mobilization forced Celestino Rodrigo to resign, and Antonio Cafiero took over the ministry of finance. By the time (mid-1975), the economy was already moving from expansion to recession. The country's external accounts were in a desperate situation, and the new economic team had to sign an agreement with the International Monetary Fund (the first of a Peronist government).

In early 1976 a new cabinet change removed Antonio Cafiero, who was succeeded by Emilio Mondelli. By that time, nobody believed in the economic policy any longer. The minister announced he had no definite plan, only specific 'measures' (Rapoport 2011). Meanwhile, the president seemed only concerned with maintaining an image of dignity in the face of the upcoming end. The fiscal deficit had reached an unprecedented 12.4% of GDP, and it was totally out of control (Gerchunoff and Llach 2003). In March 1976, price increases reached a technically hyperinflationary pace: for the first time in Argentina's history, wholesale prices rose by more than 50% in a single month. But the government of 'Isabel' never announced this record. On March 24, 1976, the military removed from power the democratically elected government of 'Isabel' Perón.

The third government of Juan Domingo Perón left deep scars in Argentine history. The *Rodrigazo* inaugurated a phase of high inflation in Argentina that lasted for approximately sixteen years. From the austerity plan of Rodrigo in 1975 to the convertibility regime in 1991, Argentina's economy lived its most dramatic years. During this entire period, the inflation rate was never below three digits. In addition to the uncontrollable rise in prices, a succession of balance of payments crises continued to hit the national economy. As always, the government's attempts to reestablish the trade balance ended in sharp devaluations of the national currency. And with each currency movement, the inflation rate increased even further. This poisonous self-reinforcing dynamic led to the emergence of an economic regime that is known in the literature as a *high inflation regime* (Frenkel 1990). In this regime, the economy suffers from very high inflation that remains stable over time due to the widespread use of indexation mechanisms. Yet, to the extent that currency crises fuel the rise in prices, the high inflation regime is one in which inflation grows in steps. So, after each currency crisis, inflation stabilizes at a higher level (Frenkel 1979).

From 1975 until 1991, Argentina lived in a high inflation regime. During that time, the magnitude of the price increases was never below three digits. This traumatic experience radically transformed the economic life of Argentines. From the mid-1970s onwards, Argentines found it increasingly difficult to protect themselves from the spiraling of prices. As the experience of inflation began to affect all social groups, people's attention focused more and more on the national economic drama. Suddenly, the increase in prices began to take over the present. As time went by, inflation started to colonize

conversations, increase the efforts dedicated to daily purchases, and discourage medium-term economic projects (Sigal and Kessler 1997). It also made calculations more complex, fostered economic speculation and brought along a fundamental uncertainty that impacted all economic decisions. As the writer Osvaldo Soriano stated in the fragment presented at the beginning of the chapter, since 1975, Argentines *"cohabited with inflation as with the landscape"* (Soriano 1989, 43). As everyone (business people, workers, and the state itself) sought to defend themselves from the violent rise in prices, new mechanisms to cope with inflation emerged. Notably, the widespread use of indexation helped citizens protect themselves (at least partially) from alarming price increases. For many years, both prices and wages increased according to private and public indexes (Frenkel 1979). However, indexation also helped to fuel inflationary inertia. Inflation indexes fostered a cyclical dynamic in which competing inflationary expectations lead to repeated increases in price levels. With time, sustained high inflation led to economic chaos. To the extent that the prices of individual goods did not increase at the same rate, the national economy's price structure became utterly distorted. Over the years, nobody knew anymore how much each thing should cost. Moreover, as the inflationary dynamic took a new dimension, the traditional measures to curb it lost the effectiveness they had left. In turn, the lack of effectiveness of economic policies fed the image that the authorities did not know how to control inflation. Understandably, Argentines stopped trusting in the authorities' capability to put an end to the economic chaos. While social despair increased, inflation started to seriously compromise the monetary functions of the Argentine peso.

The military dictatorship and the use of the dollar as a nominal anchor (1976-1981)

Between March 24, 1976, and December 10, 1983, Argentina was governed by the military. The 1976 military coup was the sixth and last successful coup within the series of coups that had begun in the 1930s. The presidential military board (in Spanish *junta militar*) was comprised of the generals Jorge Rafael Videla, Emilio Masera and Orlando Agosti. The military coup that started in 1976 was the worse and deadlier coup in Argentine history. In six years, the dictatorship put in place a violent plan of state terrorism. The military kidnapped, tortured and disappeared more than 30,000 people. Regrettably, in early 1976, amid the political and economic upheaval that Argentina was

going through, the military coup was received with relief by a part of society. Even the government (or what was left of it) seemed anxious to get rid of a responsibility that had become too heavy (Gerchunoff and Llach 2003).

When the military retook power, Argentina had already been suffering from chronic inflation for thirty years. Faced with a society that was getting increasingly tired of political conflicts and economic failures, the military government joined the collective search for a remedy against inflation. This time, however, this remedy came from the side of economic orthodoxy. In stark contrast to the heterodox anti-inflation plan put in place by Gelbard in 1973 (which saw inflation as the outcome of distributive struggles), the military government identified a different culprit. According to José Alfredo Martínez de Hoz, the new minister of finance, inflation was a direct consequence of the previous years' industrialization model, which had grown under the shelter of excessive protectionism. Based on such a diagnosis, the economic team implemented a series of measures that had mainly two aims: reducing what they saw as a disproportionately large fiscal deficit and fostering market deregulation (Rapoport 2010). It must be noticed, however, that the measures implemented by the military government between 1976 and 1981 were not a coherent and consistent anti-inflation plan. Instead, the anti-inflation 'plan' of the last military dictatorship was an incoherent succession of measures that followed one another more or less spontaneously (Gerchunoff and Llach 2003).

At first, the government of Jorge Videla set up a rather gradualistic economic program. The memory of the *Rodrigazo* was still too vivid to attempt anything of the sort. During 1976 and 1977, the economic authorities gradually introduced a series of policies aimed at reducing state intervention and promoting market self-regulation. The list of measures included several well-known ingredients: a currency devaluation, wage freezing and price liberalization (Rapoport 2010). Martinez de Hoz argued that dismantling protectionist policies would encourage the development of a more competitive industry. The military government, thus, opened up the economy to indiscriminate international trade. Crucially, the government implemented two measures that transformed Argentina's economy forever. The first was the financial reform of 1977, which put an end to the project of an industrial Argentina. The second was a crawling peg exchange rate policy nicknamed the 'Tablita cambiaria'. The 'tablita' would be the first anti-inflation plan in Argentina to use the dollar's price to coordinate inflation expectations. The plan was the first in a series of

several anti-inflation plans using the dollar as a 'nominal anchor'. Through this policy, the central bank became the chief promoter of dollarization.

The financial reform of 1977

One of the most important policies of the early years of Videla's government was the financial reform of 1977. Financial reforms were nothing new in Argentina. Indeed, since the central bank's creation, the national financial system underwent numerous transformations. Times of greater openness alternated with others of higher restrictions and regulations (Rougier and Sember 2018a). However, the 1977 financial reform marks a turning point in the history of Argentina's economy. The reform produced profound changes in the national economic structure, changes that had a decisive impact on the country's growth model and that, still today, continue to shape the national economy (Cibils and Allami 2010). In this regard, the financial reform of 1977 was a crucial step for the emergence and consolidation of a new growth model. After the reform, Argentina finally abandoned the idea of becoming an industrialized country and fully embraced a model of international economic insertion based on the exploitation of its natural resources (Azpiazu, Basualdo, and Khavisse 2004). The consolidation of such a growth model was only possible because of the enormous repression of the military dictatorship against industrial workers and other social groups committed to the project of having an industrialized country. As a consequence of the reform, the Argentine economic structure became less and less diversified and focused increasingly on the production of commodities (such as wheat and meat) and low-value-added agricultural supplies (Gaggero, Schorr, and Wainer 2014). In parallel, financial deregulation fostered speculation, foreign indebtedness and capital flight (Basualdo and Kulfas 2000).

The reform of 1977 was the result of two specific laws: Act 21,495 (which enforced the decentralization of bank deposits) and Act 21,526 (which provided a new regulation for financial entities within the country) (Cibils and Allami 2010). These two acts completely transformed the Argentine financial system. As noted by Daniel Fridman (2010, 288), the new laws produced crucial changes. Among them, the central bank stopped being the exclusive manager of deposits; thus, private banks could take their own deposits. Moreover, interest rates were liberalized. This way, financial firms could decide the interest rates of their financial products and compete among themselves. Last, all financial

deposits were fully guaranteed by the central bank. That meant that if a financial firm broke, the state would return one hundred percent of the capital invested to depositors. The liberal spirit of the deregulation of national interest rates was clearly incompatible with bank deposits' full guarantee. Therefore, the reform resulted in massive speculation. Between 1976 and 1980, the financial market boomed. As financial firms competed to attract more and more customers, they started to offer higher and higher nominal interest rates. Due to the lack of regulation, real interest rates surpassed the levels that would have been sustainable. The speculation game between financial firms resulted in real interest rates that were considerably above the inflation rate. As financial assets became a very profitable business, resources in the financial system grew enormously (Fridman 2010). The reform thus created a high-risk scenario and encouraged fraudulent financial operations. Self-loans (i.e., the channeling of loans to related companies of doubtful solvency) were frequent. Short-term investing in the financial market became extremely popular. The most common strategy was nicknamed *'la bicicleta financiera'* (the financial bicycle). The financial bicycle was a speculative practice aimed at obtaining interests in pesos and converting them into dollars.[59] Between 1978 and 1981, the 'financial bicycle' was so typical in Argentina that it was portrayed in films and theatre plays. The Argentine writer Osvaldo Soriano (whose article I quoted in the beginning of the chapter) describes the practice as follows:

> *"In November 1988, depositing money on a term deposit at any bank paid an interest of 8% monthly (in dollars). The dynamic attracted foreign capitals that were briefly deposited in the [national] financial market only to return, well augmented, to their safe havens in New York or Switzerland. It is estimated that 10 billion dollars came from abroad and were deposited in Argentine banks. These capitals increased due to speculation at the expense of the state. The transaction was simple. [...] If someone had, for example, 100,000 dollars, he exchanged them for australes and deposited them on a bank. The deposits paid a 10% interest (or 14 % in the black*

[59] The 'financial bicycle' was the nickname for a trading strategy usually known in the literature as *carry-trade*. It is a trading strategy that involves borrowing at a low-interest rate and investing in an asset that provides a higher return rate. In 1978 carry-trade in Argentina typically involved three steps. First, the investors borrowed in dollars in the international market, where interest rates were systematically lower than the local ones. Second, they converted the dollars obtained into pesos and invested them in the local financial market. Finally, since the exchange rate was fixed and they faced no exchange rate risk, investors converted the profits in pesos back into dollars and deposited them in a foreign account.

market). Interests accumulated every seven days. Because the dollar price was fixed, after a month, you could buy 108,000 dollars (with the original 100,000). Interest rates were announced many times every day by radio and television, before the weather report".[60]

To aggravate the situation, it was not only the private sector that profited from speculation. The state also joined the game of indebtedness and financial gambling. The combination was explosive. Naturally, although the system was able to survive for a couple of years, it eventually collapsed. In 1980, the Banco de Intercambio Regional (the Regional Exchange Bank), one of the country's largest financial institutions, went bankrupt. This event triggered a bank run that ruined three other major banks. By the end of 1980, the state had to take control of 60 financial institutions.

All in all, Martínez de Hoz's early years' gradualist measures did not succeed in stabilizing the economy. Although inflation fell, it remained in triple digits. From a rate of over 300% per year in 1975, the annual inflation rate fell to 160% in 1976 and 140% in 1977. After gradualism, the time came to try monetary targeting the traditional way. Throughout 1978, the government drastically reduced the rate of money creation. But, again, the strategy failed spectacularly. Although the money supply increased at a rate of 2.6% per month, prices rose at a rate of 10% per month (Rapoport 2010). By the end of 1978, the government was desperate. No matter what the authorities did, inflation could not be tamed. In the ministry of finance, nobody trusted traditional recipes anymore. The turn for experimentation had finally come.

Anti-inflation policies and the use of the dollar as a nominal anchor

In late 1978 the economic authorities were desperate. The pressure to find a cure for inflation was increasing, and the traditional recipes were not helping. The authorities were increasingly lost. A potential solution reached Martinez de Hoz advisors somehow curiously. As pointed out by Mariana Heredia (2015, 93), at the time, two young Argentine economists who had just graduated from the University of Chicago, approached the national economic authorities with a brand-new proposal. The strategy

[60] Quotation from Soriano, Osvaldo. 1989. "Vivir con la inflación." *Nueva Sociedad* 100: 41.

was inspired in a recent theory that had just been developed in Chicago's monetarist circles, and which eventually came to be known as 'the monetary approach to the balance of payments'. The theory was an extension of classical monetarism to the case of open economies. The approach's basic premise was the recognition that balance of payments disequilibrium was fundamentally a monetary phenomenon. The theory explained trade deficits and surpluses as a consequence of money demand and supply. Robert Mundell and Harry Johnson developed the approach at the University of Chicago. The advantages of the policy seemed undeniable: the strategy promised a reduction in inflation with the simultaneous achievement of better growth levels. The program's rationale was no longer grounded on the central bank's control of the money supply. Instead, the policy relied on the government's ability to establish prices that could act as guidelines: minimum wages, public tariffs, and the nominal exchange rate. According to the theory, as long as these prices were fixed, they would act as an 'anchor' for inflation expectations; that is, they would serve as a guideline that would help social actors to predict future prices.

The policy proposed to use the price of the dollar as a 'nominal anchor'. Using the price of the dollar as an anchor to guide expectations was not an entirely new idea. The use of the exchange rate as a tool for coordinating inflation expectations had already been tested in some historically well-known stabilization programs, such as the plans implemented in Austria in 1922 and Germany in 1923 (Dornbusch and Fischer 1986). For example, in the German case, the government had set an exchange rate target and used a significant amount of reserves to sustain it against speculators. The policy was incredibly successful and brought price stability. As for the stabilization plan implemented in Austria in 1922, contemporary accounts stress how the exchange rate helped to coordinate inflation expectations despite the economic chaos: "The foreign exchange rates were a guide to understand prices' movements. The first question which the Austrian population asked every afternoon was "How are the foreign exchanges moving?" or more exactly "What does Zurich say about the crown?", ("Wie kommt die Krone aus Zurich?")" (Van Walre de Bordes, 1924, p. 197; cited in Dornbusch and Fischer (1986, 12)).

The logic of the underlying theory was simple. Primarily it emphasized the importance of controlling inflation expectations to control the inflationary process. The main argument was that reducing the fiscal deficit and limiting monetary emission was not enough to control inflation. This was especially true for economies that have been exposed to a high

level of inflation for several years. In these economies, once the monetization of the fiscal deficit had come to an end, the monetary authorities still needed to find tools that could help them channel economic agents' expectations on future prices. That meant that during the transition from a period of high inflation to one of lower inflation, the government needed to provide guidelines for economic agents to calculate future prices. Thus, by setting some key prices, the government could provide a stable and trustworthy index that the public could rely upon to calculate future prices. In most cases, in Latin America, inflation stabilization plans used the price of the US dollar with such purpose.

While the idea of using the price of the US dollar as a nominal anchor was not entirely new, it is not surprising that it reappeared between the late 1970s and early 1980s. In fact, during that period economists were having great debates regarding the role of expectations in shaping economic dynamics. Especially crucial at the time were the discussions about the role of expectations for the reproduction of inflation and the debate on whether inflation expectations were either 'rational' or 'adaptive'. Proponents of the rational expectations hypothesis argued that economic agents' predictions on future inflation were based on the information they had about the present and their expectations of the future (Sargent 2013). In contrast, proponents of the adaptive expectations hypothesis stated that individuals predicted future inflation based on their past experiences (Parkin 2017). So, while for rationalist economists, social actors formed their inflation expectations by looking to the future, for the adaptive hypothesis advocates, they did so by looking to the past. The debate never really settled. In any case, the critical point for the present discussion is that, during the late 1970s and 1980s, economists were vigorously debating the role of future expectations in the reproduction of inflation. In the midst of these debates, both orthodox and heterodox economists went back to the idea of using nominal anchors as a strategy to guide the population's inflation expectations. As I have just described, monetarist economists were the first to propose using the exchange rate as a coordination tool during the late 1970s. Later on, structuralist economists made a similar proposition. In fact, many heterodox anti-inflation plans designed during the 1980s (i.e., the Plan Austral in Argentina and the Plan Cruzado in Brazil) proposed to abolish indexation and to rely on the use of the dollar as a coordination tool to help taming inflation.

In Argentina, the first use of the exchange rate as a nominal anchor can be traced back to the stabilization plan implemented by José Alfredo Martínez de Hoz in 1978. With the advice of the Argentine economists who had just graduated from the University of Chicago, the economic authorities developed a specific exchange rate policy. The policy was a crawling peg; that means it was a fixed exchange rate regime with frequent small adjustments. The policy consisted of a schedule of preannounced small devaluations, and exchange rate calendar that was nicknamed by the public as the 'Tablita Cambiaria' (the exchange rate schedule). The new exchange rate policy was launched on December 20, 1978, and remained in effect until February 1, 1981. The calendar would be (together with lower import tariffs) Martinez de Hoz's last attempt to control inflation until he left office in March 1981.

The 'tablita' was a calendar that specified the US dollar's future value for the upcoming months (Fridman 2010). The calendar's purpose was to provide a clear guideline that could help economic agents forecast future inflation. Ultimately, the only thing Argentines had to do was check the dollar's future value in the calendar and use it as a proxy to calculate future prices. The calendar established a set of predetermined exchange-rate values that increased over time. Crucially, however, each increase was smaller than the previous one. Therefore, it was expected that the exchange rate's value would stabilize at a level that was consistent with the inflation rate. According to the government, domestic inflation would follow the exchange-rate movements and eventually converged with international inflation rates. In addition to the dollar's price, there were also other prices that the government had to keep fixed. The list included public tariffs and minimum wages. Each of these prices had their specific calendars. It was assumed that convergence of all these prices would ensure a decreasing and orderly evolution of the inflation rate (Gerchunoff and Llach 2003).

The policy extended from 1978 until the beginning of 1981. However, it proved dramatically unsuccessful. Prices resisted taming and grew much faster than the fixed exchange rate values. In fact, between 1978 and 1979, inflation barely fell from 171% to 163%. Strikingly, wholesale inflation increased from 146% to 149% (Gerchunoff and Llach 2003). The exchange rate lag, in turn, made imports extremely cheap and ended up severely damaging the national industry. Many industrial companies could not compete with imported products and had to close down (Fridman 2010). As always, the big

question was why inflation remained high. In this case, the answer is that most prices were not subject to external competition. The markets for food and services could not be tamed by opening the economy to indiscriminate trade. The same rule applied to those goods provided by the state. So, in the end, the elimination of trade restrictions did not affect inflation and only served to destroy the national industry (Rapoport 2010). Moreover, the low price of the dollar during these years only fostered speculation and made the crisis at the end more dramatic. In February 1981, the exchange rate policy was abandoned. The abandonment of the 'tablita' was followed by a sharp devaluation that spoiled Martinez de Hoz's last attempt to stabilize the economy. The minister and his team resigned, leaving his successors a climate marked by increased currency speculation and massive capital flight. Martinez de Hoz's administration summary was a deindustrialized economy with a very high fiscal deficit and an unprecedented level of foreign debt. Inflation persisted in the three digits.

One of Martinez de Hoz's administration's most lasting legacies would be, precisely, his exchange rate policy. Despite the lack of success of the 'tablita', the idea that a guide was needed to help coordinate inflation expectations persisted. Thus, during the 1980s and early 1990s, several stabilization plans in Argentina attempted to stabilize future inflation expectations by establishing a fixed exchange rate. The most notable example of a stabilization plan based on exchange rate fixing would be the Convertibility Plan in 1991. The policy of using the dollar as a nominal anchor would have enormous consequences for Argentina. Through these policies, the central bank encouraged Argentines to use the dollar to calculate future prices. This way, the monetary authority became the chief promoter of dollarization. Over time, the continuous use of the dollar as a nominal anchor contributed to an economic dynamic in which the exchange rate would tend to increase less than the inflation rate for an extended period, only to increase suddenly and unexpectedly at a given point. Thus, the use of the dollar as a nominal anchor increased sudden exchange rate adjustments.

When Martinez de Hoz left office, the economy was thrown into chaos once again. General Jorge Videla, until then president, was replaced by General Roberto Viola. Later, Viola was succeeded by Generals Leopoldo Galtieri and Reynaldo Bignone. As if the president's succession was not enough, in the twenty-two months between Videla's departure (in March 1981) and the restoration of democracy (in December 1983),

Argentina had four ministers of finance: Lorenzo Sigaut, Roberto Alemann, José Dagnino Pastore and José Wehbe. The four ministers launched an unhealthy succession of stabilization policies, all of which contradicted each other. Lorenzo Sigaut set in motion a heterodox program and enforced exchange rate controls. Roberto Alemann's brief counter-reform followed. He drastically reduced public spending and liberalized interest rates. Faced with the breakdown of the financial system, José Danino Pastore and José Wehbe decided to nationalize the private sector's enormous foreign debt. They transferred the responsibility for paying the loans to the State, even though this debt was caused by speculative trading by the Argentine private sector. With this, they bequeathed to the young democracy, a structurally insolvent country. Once again, each of these policies failed to control inflation.

Argentina's lost decade: from high inflation to hyperinflation (1980-1990)

When, in 1983, Argentina became a democracy again, president Raúl Alfonsín had to take charge of an economy suffering severe imbalances. He received an inflationary, indebted and recessive economy and had no room for maneuver to provide a fundamental solution to Argentina's long-standing problems. The end of the military government and the return to democracy coincided with the beginning of the Latin American Debt Crisis. This event would leave an indelible mark in the region's countries, including Argentina (Ocampo et al. 2014). The crisis constrained even further Alfonsín's little room for action. The main problem was the overwhelming magnitude of the country's foreign debt - which was far beyond its real capacity to repay. The concern was not exclusive of Argentina, though, but extended to most Latin American countries. The cause of the crisis had to be traced back to the 1970s. In an international context characterized by high liquidity and low-interest rates, foreign banks had encouraged Latin American countries to borrow at an unprecedented level. Although it is difficult to understand such excessiveness, both the private and the public sector had indebted themselves far beyond their real capacity to repay.

In Argentina's case, when the military took power in 1976, the foreign debt amounted to $5.3 billion. Instead, in 1983, the country's foreign debt accumulated $45 billion (Rapoport 2010). The issue was not just the scale of the debt. In the early 1980s, the global

situation led developed countries to implement monetarist policies that led to an exponential increase in international interest rates. The change of circumstances made the debt burden intolerable for Latin American countries. In 1982, the Mexican default caused the interruption of external financing to the countries of the region. Without access to new loans, Argentina found itself without resources to repay its enormous foreign debt. The lack of options left the government without strategies other than monetary issuance. Naturally, the issuing of money to repay the country's foreign debt only aggravated the inflationary problems even further (Ferrer 2012). Thus, the Latin American debt crises' problematic external conditions added to Argentina's endemic problem: the indomitable inflation. Between 1983 and 1991, inflation in Argentina surpassed a new record. From a 333% rate in 1983, inflation rose to 626% in 1984, producing the country's first hyperinflationary crisis. In 1985, the rate fell again to 385.4% but remained in the three digits (Gerchunoff and Llach 2003).

In these circumstances, it is surprising that the priority of Bernardo Grinspun - president Raúl Alfonsín's finance minister - had not been inflation but full employment. In fact, in 1983, the national economic policy was oriented, above all, towards seeking economic recovery and increase the wages of the working class. To achieve these objectives, the minister had implemented gradual measures that included: the state's control of the exchange rate and interest rates, cheap credit and increasing public spending (Heredia 2015). However, as inflation reached dramatic figures, the government started to focus more on the fight against inflation. Grinspun turned to the usual tools: he devalued the currency, increased public tariffs, cut public spending (i.e., salaries and pensions), and restricted money issuance. But in a country that had already used every possible tool to try to control inflation for almost four decades, the anti-inflation measures did not get the support they needed. Once again, the plan failed. With Grinspun and his team accused of lack of ability, Alfonsín asked the minister to resign. In February 1985, Juan Vital Sourrouille took his place.

Shortly after the change of authorities, preparations for the launch of a new stabilization program began. Minister Sourrouille summoned a group of economic experts (mostly coming from the structuralist school) who started to work secretly on the design of a new anti-inflation plan. The main idea was that to be successful the policy needed to stop the inertia of inflation expectations. According to the experts, the lack of results of the former

plan, mostly based on a monetarist strategy, proved the need to act directly on the public's expectations to eradicate inflation (Heymann 1986). The economic reform (soon to be renamed in the press as the *Plan Austral*) was announced on Friday, June 14, 1985. The plan was inspired by the 1920s inter-war Europe's plans. The policy eliminated indexation mechanisms and sought to act on people's inflation expectations, and to curb the inertial tendency of price increases to perpetuate themselves (Gerchunoff and Llach 2003). Minister Sourrouille spoke on the national television and announced the measures. Based on a heterodox conception of inflation, the plan proposed various measures to combat spiraling prices. As a remedy to the deficit, the government committed to raise tax revenues, rationalize expenditures, slow down monetary emission, and resort only to financing provided by an IMF loan. As a remedy to the inertia caused by indexation mechanisms and distributive struggles, the authorities proposed freezing prices. Also, the plan included a complex system of deindexation for contracts. As a remedy to the imbalance between productive sectors of the economy, the policy promoted industrial exports. Finally, the plan included a monetary reform that replaced the peso with a new currency: the austral (Heredia 2015).

The austral plan was received with relief. Moreover, it achieved complete stabilization. Astoundingly, price freezing and fiscal tightening worked, and inflation expectations started to decrease. Capital flight also moderated. At the beginning of 1986, the austral plan was an economic, political and intellectual success. The achievement of the Argentine economists was of interest to everyone. Moreover, the plan served as a model for other countries seeking to combat chronic inflation, including Brazil. The *Cruzado Plan* (1986) was a copy of the austral plan. Beyond the public's euphoria, however, the economic authorities knew that the hardest challenge was still ahead. After the initial shock, the critical concern was successfully deactivating inflation's root causes (i.e., the fiscal deficit and the excessive money issuance).

Only then could the economic authorities guarantee that inflation expectations would remain low over time. Unfortunately, policymakers were in the middle of these discussions when prices began to rise once again. Stability had been short-lived. As prices rose, public tariffs and the price of the dollar were left behind. As the relative price structure began to distort, policymakers wondered how to make prices more flexible without feeding distributive struggles. In April 1986, the authorities decided to change the policy of 'frozen prices' for one of 'managed prices'. They also determined that public

tariffs and the exchange rate would gradually increase to adjust to the increase in wages and other key prices. However, the announcement of the policy change reopened the distributive struggles, and inflation shot up. When, in mid-1986, inflation began to move away from the path designed by the economic authorities, the government no longer had a structured strategy. Caught with their guard down, the economic team implemented an unorganized succession of individual measures with no clear direction. Once again, inflation had shown its never-ending capacity to attack again when society least expected it.

At that point, the government was utterly disoriented. Also, they had less and less room for maneuver. While its monetarist opponents rejoiced over the failure of the economic authorities, society became increasingly impatient. The economic team's approach to inflation was judged to be increasingly inadequate. It no longer mattered what the real causes of inflation were. It was not possible to wait for the development of specific productive sectors that could balance the economy. As the seriousness of the price increase rose, society demanded more and more urgent solutions. The government needed to act quickly and effectively. But the public authorities did not know what to do. The persistence of inflation over time had diminished the effectiveness of the most common anti-inflation policies. On the one hand, the authorities knew that traditional strategies alone (such as fiscal and monetary adjustment) would not lower inflation because they could not redirect inflation expectations (Heredia 2015). On the other, strategies to contain distributive struggles (such as price and wage freezes) had been used so often that they were already worn out. The time needed for pursuing structural changes in the economy was too long; therefore, this approach was unsustainable. The international context did not help either. With international markets that were closed, Argentina could not turn to them to finance its fiscal deficit. Fighting inflation seemed an impossible task. An economist close to the government described the situation as follows:

> *"Economists from the old structuralist school, that was very strong in the region stated that you had to modify the economic structure to fight inflation. Of course! But to modify the structure takes years. And in the meantime, what do you do with inflation? So we started to work based on what we knew from the German experience of hyperinflation in the 1920s. The idea was that to stop inflation a shock was needed.*

And that was the austral plan. […] If a guy has a fever of 37 degrees, you say, okay; but if he has a fever of 42 degrees for three months, the situation is different. That cannot be fixed with an aspirin. Inflation of the kind Argentina had was not a cold. Therefore, it could not be cured with aspirin. And the truth is there was no theoretical knowledge on how to deal with such reality. [...] Over time, tools wear out. [...] Price control work only for some time or when you have little inflation. But in cases like Argentina, price controls were a permanent source of conflict between the state and the companies. In Argentina, there were price controls from the 1950s to the 1980s. [...] So, at the time, there were economists who came back to the old tools and those who tried to come up with new ones".[61]

Cornered on all fronts, the economic authorities did what they could. A second phase of the Plan Austral (1986) was followed by the *Australito* (1987) and the *Plan Primavera* (1988), two austerity policies of a liberal orientation, which followed each other. The second phase of the austral plan began when, by the end of 1986, the International Monetary Fund loan ran out, and the need to finance the public deficit with money issuance reappeared. Thus, in early 1987, monthly inflation threatened to return to double digits. The economic team froze prices: that was the Australito. The Australito was followed by the Plan Primavera, implemented in August 1988. The plan was a typical orthodox stabilization plan, whose most crucial stabilizing tool was the exchange rate. That is to say, it was part of the family of anti-inflation plans that used the dollar as a nominal anchor. In this regard, it was similar to the 'tablita' and the austral plan. However, the scarcity of international reserves (which was only temporarily covered by speculative capitals that took advantage of the high-interest rate in dollars) and the political and economic uncertainty contributed to putting an end to the Alfonsín's government last stabilization attempt.

By April 1989, economic disruption was total. The state had lost control of the economy. The public authorities were entirely lost. At the end of April, Juan Carlos Pugliese (the

[61] Quotation from an interview made to an advisor of the ministry of finance during the government of Raúl Alfonsín. Interview cited in Heredia (2015, 115).

new and short-lived minister of finance),[62] declared on television: *"I do not know why the price of the dollar is rising or how to stop it"*. And on May 26, he responded to a journalist: *"I do not know what is happening. I do not know how this situation came about"* (Sigal and Kessler 1997, 171). At the time, the inflation rate was 200% per month. Even if the government knew that they needed to lower monetary issuance to reduce inflation, this was not an option. The state was bankrupt, and foreign debt payments could only be financed by issuing money. In these circumstances, the only question for the government was when the debacle would occur. The final blow came in 1989 when the World Bank announced that it would no longer continue helping Argentina. The announcement resulted in massive capital flight. The central bank used $900 million to try to stop the crisis but failed to do so. The national currency depreciated heavily. While in May 1989 a dollar costed 100 australes, in November 1989 it costed 1000 australes and in December 1990 almost 10,000 asutrales. The rate of inflation exceeded 3000% per year.

On May 14, 1989, Carlos Menem was elected president (Gerchunoff and Llach 2003). By then, the country was in complete chaos. The main economic groups had withdrawn their support for president Alfonsín. In concrete terms, this meant that many deposits from banks were withdrawn, export companies suspended their sales in the foreign exchange market, and firms stopped paying their taxes. Political movements carried out massive social protests in principal cities, such as Rosario and Buenos Aires. Spiraling prices did not stop. Prices in supermarkets increased during the time between people collected the products and paid them at the counter. Wages were not sufficient, and people were starving. Society plunged into despair. President Alfonsín decided to resign and hand over the presidency to the recently elected Carlos Menem. Menem accepted but imposed conditions. He forced the radicalism (Alfonsín's party) to endorse the profound reforms that the incoming government was already determined to implement (Rapoport and Guiñazú 2016).

[62] Juan Carlos Pugliese became Minister of Economy on March 31, 1989, after the resignation of Juan Vital Sourrouille. He was in office until May 24, 1989, that is, less than two months. He resigned for health reasons. Jesus Rodriguez succeeded him.

The advance of dollarization (1970-1990)

As I showed in the previous chapter, in the 1960s and 1970s, saving in US dollars was already part of Argentines' financial practices. However, during the 1970s and 1980s, the popularity of the US dollar increased. As Luzzi and Wilkis (2019) show, in the 1970s and 1980s, broader sectors of the population started to hoard cash dollars as a strategy for keeping their savings. The habit of buying dollars in exchange houses became such a popular way of preserving savings from inflation in Argentina that it started to be reflected in television programs and in highly successful films, such as the well-known film *Plata Dulce* (Sweet money), directed by Fernando Ayala and released on July 8, 1982. Moreover, during the 1970s and 1980s, as Argentina's high inflation morphed into hyperinflation, most markets adopted the US currency as the primary reference to publish prices. One of the leading promoters of the use of the US dollar was the monetary authority itself. The Argentine central bank explicitly promoted the use of the US currency as a reference to calculate prices. Since 1978, when Martinez de Hoz had enforced the 'tablita', until the implementation of the convertibility plan in 1991, the monetary authorities increasingly encouraged citizens to use the dollar as a reference. During the military government, the government even carried on television campaigns that proposed to Argentines that they had to 'change their minds' and learn to calculate in dollars (Fridman 2010). Since December 1978, Argentines were encouraged to rely on the 'tablita' (a calendar that stated the exchange rate value for the upcoming months) to predict future prices. Moreover, the anti-inflation plans implemented during the 1980s (the austral, the australito and the primavera plans), also relied heavily on the exchange rate as a coordination tool. Mainly, these policies were intended to counteract inflationary inertia. Thus, they encouraged Argentines to use the dollar as a source of stability in an increasingly chaotic monetary world. However, with the imposition of anti-inflation plans based on the dollar as a nominal anchor, the central bank became the chief promoter of dollarization. Thus, the state contributed to intensifying the dollar's social use and displace the peso from the monetary scene.

During the 1970s and 1980s, the dollarization of references extended to many markets. Mostly markets for goods that were used as a store of value. In 1977, prices in the real estate market started to be systematically advertised in dollars (Gaggero and Nemiña 2016). Prices also dollarized in other markets, such as the market for durable goods,

including the car market and the market for household appliances, and imported luxury goods. The tourism market and the market for works of art also dollarized during the 1970s (Luzzi and Wilkis 2019).

As the tendency to advertise prices in dollars became more and more common, so did the practice of hoarding dollars. While currency crises and inflation continued to hit Argentina, people started to save in cash dollars. Again, the central bank not only allowed but also validated this practice. Probably due to increasing social pressure, the central bank allowed (during many periods) Argentines to purchase dollars. As rising inflation consolidated the feeling that something had to be done with the savings to prevent them from disappearing, the purchase of dollars became a usual strategy for protecting savings. Financial openness encouraged dollarization even further. Since the 1977 financial reform, the financial sector increasingly promoted US dollar deposits and loans (Fridman 2010). After 1977 hoarding foreign currency became increasingly accessible. While before 1977, to save in dollars, Argentines needed to buy government bonds issued in dollars; since May 1977, restrictions on foreign currency purchase and sale were removed. For the first time since 1971, the public could acquire dollars without restrictions (Luzzi and Wilkis 2019). Moreover, the foreign exchange market's opening also enabled the financial sector to offer foreign currency deposits to its customers. Also, exchange houses were allowed to sell cash dollars.

The US currency also received increasing public attention in the press. This attention also helped to promote the use of the dollar as a strategy for saving. In the unstable economic circumstances of the 1970s and 1980s, the dollar was frequently in the national newspapers' covers. Sometimes the reason for the increasing populatirty of the dollar were currency crises and monetary chaos. Currency runs occurred almost every week. Currency holidays and urgent regulations imposed by the government also led the dollar to gain more space in the press. The exchange rate was a daily news item in all the newspapers. The dollar also appeared in advertisements. Sometimes it even appeared in the crime section. Especially during the 1970s, the illegal dollar market received a lot of media coverage. At the time, the central bank carried conduct undercover operations to disrupt gangs engaged in illegal currency trading (Luzzi and Wilkis 2019).

No doubt, hyperinflation led dollarization to the climax. A four-digit price increase is an extremely infrequent phenomenon. The most frequently cited case is the German hyperinflation of the 1920s. Hyperinflation is the most severe crisis that can hit a monetary economy. During hyperinflation, the state loses total control of the currency and the economy. The price structure is no longer coherent. The whole system of equivalence becomes incoherent. Price increases are exponential. Inflation becomes uncontrollable and unpredictable. The national currency can no longer perform any of its functions, including being a means of payment. The monetary authority vanishes. In 1988, inflation in Argentina reached 387.7% annually. In 1988 the rate rose to 3,079.5% and in 1990 to 2,314%. During those years, the Argentine economy dollarized completely. In 1987, the newspaper *La Nación* reported that the number of dollars in the public's hands had already reached 5.5 billion dollars (Luzzi and Wilkis 2019, 165). By 1989, practically all markets were dollarized. The real estate market and the art market were no longer the only markets that advertised their prices in dollars. The prices of most products were advertised in dollars. The list included the most varied items, including chemical reagents, raw materials for the food industry, automobile parts, musical instruments, household appliances and photographic products. Services such as plumbing and even psychological assistance were also dollarized. In almost all cases, the transactions themselves were also paid in dollars. Hyperinflation caused the virtual destruction of the currency. At their peak, price lists in supermarkets and other shops did not last more than a day. The forms of financing disappeared. The country's economy was in chaos. Prices, interest rates, and even the dollar rate varied from city to city (Sigal and Kessler 1997).

The dollar became the antidote to the damaged argentine currency. Even if by 1984, spiraling prices were not new in Argentina, the familiarity with inflation did not make hyperinflation any less traumatic. Even if three decades of inflation had allowed citizens to develop some strategies to protect themselves (at least in part) from price increases, hyperinflation gave these practices a dizzying pace and an unprecedented magnitude. There were individual and collective strategies. At the individual level, the time horizon for transactions shortened. Principal transactions were dollarized. Usually, individuals bought cash dollars when they received their salaries at the beginning of the month. Alternately they put their money on fixed-term deposits in dollars, which were renewed every week. Payments were delayed as long as possible (Sigal and Kessler 1997).

Collective strategies included purchase communities and saving circles. Purchase communities were groups of different families that organized themselves to buy products in advance. This way, they could survive the whole month. When they received their salaries, each family made bulk purchases of specific products they had assigned (milk, noodles, canned food). The different products were then distributed among the participating families (Spitta 1988). Saving circles also became common. These circles were closed groups of people who created a collective saving fund to purchase expensive goods, such as cars or house appliances. All group members had to pay a monthly fee. Thus, they created a joint fund that allowed them to buy goods that were too expensive to purchase individually, including televisions, refrigerators, air conditioners, washing machines, dishwashers, sound equipment, video recorders (Sigal and Kessler 1997). This practice attempted to make up for the lack of banking credit.

From stabilization to a new crisis. The Convertibility Plan (1991-2001)

From 1973 onwards, a process of profound financial liberalization began in the world. After the Bretton Woods system fell, Conservative governments gained power in both the US and Great Britain. Thus, the liberal tendency deepened even more. Neo-liberal and monetarist ideas became more popular and progressively occupied places in academic circles and economic institutions (Mirowski and Plehwe 2009). As is often the case, the new ideas gradually transformed how the economic policy was made. As national and international financial policies became increasingly liberal, monetary institutions and financial systems underwent major transformations (Fourcade and Babb 2002; Krippner 2011). Throughout the 1970s and 1980s, countries lifted restrictions on capital movements. Floating exchange rates began more and more frequent (Eichengreen 2019). Although all these transformations had local particularities, the rule was that these transformations helped to consolidate an increasingly international capital market. In the 1990s, the neoliberal trend deepened and reached unknown dimensions. The fall of communism had an enormous symbolic impact that legitimized neoliberal policies around the globe. Neoliberalism had won the battle. Countries only had to surrender to its advantages. The internationalization of trade and finance intensified. Across the globe, countries signed trade integration agreements. In Latin America, the Mercosur emerged.

The economic transformations that occurred during the 1990s had enormous consequences for the countries of Latin America. Under pressure from international monetary agencies (mainly the World Bank and the International Monetary Fund), governments in the Latin American region were forced to adopt policies that, above all, promoted the liberalization of goods and capital markets. As international organizations valued more than ever the benefits of free trade, they made the granting of credit conditional upon the adoption of openness policies. Undoubtedly, the most paradigmatic case of these transformations was the recommendations included in the *Washington Consensus* (Babb 2013). The Washington Consensus was a set of ten policy recommendations that served to design several reform packages during the 1990s. Based on a combination of monetary theories and neoliberal concepts, the reforms were expected to help Latin American nations fight persistent inflation and other economic disorders.

The various international agencies agreed to assist the countries on the periphery with credit only if accepted to implement adjustment policies. The changes they asked were not superficial. On the contrary, the measures involved profound transformations in all the major political, social, and economic institutions of these countries. The list of measures included: reducing national fiscal deficits and money growth, fixing the exchange rate, decreasing state intervention, privatizing enterprises, and deregulating the market (Williamson 2003). The overall claim was that these packages would ensure long-term macroeconomic stability and promote economic development. However, in most cases, they resulted in a slowdown in growth and a rise in unemployment. In those cases where the reforms succeed, the success was only temporary and negligible concerning the objectives the policies explicitly pursued.

Argentina was an extreme example of the transition to neoliberalism. In a brief period, the country carried out a set of profound market reforms: it privatized most of its public enterprises, opened its commercial and financial borders, and eliminated much of the state's protection to the national industry. Undoubtedly, this dizzying transition had much to do with the dramatic history of inflation that I have been showing. Far from being an initial disadvantage, the experience of hyperinflation paved the way for structural reforms. No modern economy had suffered from such high inflation for so long. Argentines were exhausted from social conflict and extreme monetary and political

instability. Thus, the Argentine society was prepared to make any sacrifice to stabilize its economy, including dismantling its state and opening up its markets completely. Politically, the 1990s were a singular time in Argentina. For the first time since Perón's death, Peronism managed to unify behind a single leader's leadership. The new leader, Carlos Menem, had been governor of the province of La Rioja. He imposed himself on the governor of the province of Buenos Aires, Antonio Cafiero, in the 1988 Justicialist internal elections of the Peronist party. He was elected president on May 14, 1989. Carlos Menem took office in July due to Alfonsín's decision to handover the government five months before the finalization of his mandate.

Shortly after Menem took office, the government set in motion a profound reform of the state. The reform sought the same thing as always: to stop inflation. The diagnosis of Menem and his team was that hyperinflation was a consequence of the state's political crisis. Therefore, once the government had solved the structural crisis, inflation would automatically come down (Gerchunoff and Llach 2003). The international pressure on the countries of the region to implement structural reforms was already being felt. The *Washington Consensus* was underway. In the first months of 1989, a group of officials from the World Bank, the International Monetary Fund, and the State Department and Treasury of the United States had met in Washington. The finance ministers of the seven world's most powerful countries and the major international banks' presidents had also participated in the meeting (Babb 2013). The conclusions were ten recommendations that crystallized into what would later be called the *Washington Consensus*. The consensus established that international agencies would help countries on the periphery with credit. The condition for the help was that these countries agreed to implement harsh adjustment policies. The prescriptions included lowering the fiscal deficit and reducing the state's size, privatizing state enterprises, facilitating the installation of foreign companies, and liberalizing financial markets (Williamson 2003). Thus, in Argentina in the 1990s, domestic needs and external pressures were all pointing in the same direction: implementing structural reforms.

Contrary to his campaign ads (which were preferably oriented to the traditional pro-industrial and progressive discourse of Peronism, which Menen was supposed to represent), Menem's economic policies soon showed that he was more than willing to follow the path of structural reforms (Heredia 2015). The first step of the new government

was to proclaim a set of economic emergency laws. These laws suspended the few tariff protections that had remained in place after the dictatorship. The industrial promotion was suspended, as were preferences that benefited domestic over imported manufactures. Also, the government started to privatize public enterprises (Rapoport 2011). Due to its intensity and speed, the privatization of public services in Argentina was a unique process. The first privatizations took place during the 1990s. In a few years, Argentina privatized many state-owned enterprises, including telephone companies, railways, roads, ports, commercial aviation and other state-owned enterprises in areas such as the steel and petrochemical industries. Health services were also transferred from the nation to the province, and the pension system was privatized (Gerchunoff and Llach 2003).

Regarding the fight against inflation, the policies of the first year of Menem's government followed the most classical monetarist tradition. The government established a strict monetary control and drastically reduced the amount of money in circulation (Rapoport 2010). As a complement, in 1989, the central bank compulsorily refinanced all savings deposits in the financial system. The government confiscated all savings and exchange them by public debt. The plan is known at the Bonex plan. Through this policy, the state converted fixed-term deposits (the most common form of savings) into long-term public debt securities. As a result of these policies, inflation went down but remained in four digits. From 3,079% in 1989 it went to 2,314% in 1990. Technically, Argentina was still in hyperinflation.

Together with Domingo Cavallo (who would become his chief minister for five years), the president Menem understood that the economic conditions required radical solutions. Once again, Argentina was forced to propose radically innovative strategies. The result was the *Plan de Convertibilidad* (the Convertibility Plan). Technically, the convertibility plan was a fixed exchange rate regime. However, it was much more than that. The major difference between a traditional fixed exchange rate scheme and the new plan was its institutional design. The plan was based on a new law: the Ley 23.928 de Convertibilidad del Austral (Law 23,928 of the Austral Convertibility) (Rapoport 2010). The law changed the currency again, from the austral created by Sourrouille back to the traditional argentine currency: the peso. According to the law, australes would be converted to pesos at a fixed exchange rate of 10,000 australes in exchange for one peso. Simultaneously, the law forced the central bank to maintain a fixed exchange rate between the dollar and

the peso. With a measure charged with great symbolism, the exchange rate between the peso and the dollar was ‘one to one’ (so that one dollar costed one peso). In other words, the Argentine peso was worth the same as a dollar. In addition to stipulating that a peso was worth the same as a dollar, the law indicated that pesos issued by the central bank had to be fully backed by dollars. Thus, the law required the central bank to maintain sufficient foreign exchange reserves to purchase the entire monetary base at the exchange rate established by law (Roig 2016).

Due to its design, the plan was much more than a traditional exchange rate regime. The fact that the value of the dollar was fixed by law was not a minor detail. It was a promise that the national currency would keep its value that was engraved in the legislation. The central bank thus abdicated all power to conduct monetary policy. It only had to maintain the fixed exchange rate, and it was directly unable to make any decisions on the national currency. In fact, to the extent that the exchange rate was fixed by law, changing the exchange rate required the National Congress’s official approval. Just like during the gold standard, the Argentine central bank’s only task was to expand or contract the monetary base according to foreign exchange inflows or outflows. Overall, the convertibility plan implied that the central bank renounced to have any control over its currency. So after 40 years of having failed successively in keeping the promise on the enduring value of its currency, the Argentine state abandoned any attempt to keep that promise. With an exchange rate fixed by law, the Argentine state chose to link its currency’s value to the value of the dollar and then tied its hands.

In sum, the convertibility plan had two central features, which are crucial to understanding its success. First, with the new policy, the monetary authorities were no longer in charge of the national currency. The hidden notion was that, if the monetary authorities could not control the currency, the best they could do was to leave the task altogether. This way, at least, society (which for years had learned to fear the state) could begin to recover some of its sullied trust. The second important feature of the plan is that, in practice, the convertibility law did nothing but materializing an ongoing reality, namely, dollarization. In fact, by 1991, transactions and contracts were dollarized in Argentina (Corso 2015). During the 1980s, hyperinflation had destroyed the only monetary function that the peso retained, which was to be a means of payment. So, as Menem’s finance minister, Domingo Cavallo, confessed, the convertibility plan emerged from an observation of the

national reality. The plan did nothing more than to convert ‘the people’s desire’ into law (Roig 2016).

On March 20, 1991, the project developed by Domingo Cavallo and two of his collaborators (Horacio Liendo and Juan José Llach) was announced to the country and sent to the national congress for debate. On March 27, the bill was approved by both Chambers (Roig 2016). In his presentation to Congress, Cavallo made clear his diagnosis of inflation. In his opinion, the main problem was the fiscal deficit. Thus, to solve it, it was necessary to put an end to excessive monetary emission. Once the law was adopted, the government would be legally unable to issue currency without reserves. As a consequence, investors and price-makers could feel safe. The law would make it possible to achieve economic stability. Simultaneously, the plan included a policy of open trade, which would allow for greater competition between foreign and domestic products and would help reduce prices further. Stability would bring growth and stem the tide of speculation. Many claimed that convertibility was a step towards dollarization. But Cavallo insisted he aimed to give Argentina a currency (Heredia 2015).

The success of the plan was resounding. From 2,314% inflation in 1990, the rate dropped to 84% in 1991 and 17.5% in 1992. In 1993, Argentina’s inflation was barely 7.4%. After forty years of fruitless struggle, Menem and Cavallo had finally defeated inflation. No one could believe it. In just two years, Argentina had become one of the most stable economies on the planet. Euphoric, Argentines returned to the financial system. They created deposits in dollars and took loans and mortgages. The United States’ government and the IMF, who had not initially supported the plan, started to recommend the Argentine recipe to other countries in problems. Meanwhile, in Argentina, pesos and dollars traded at par in the national economy. Banks were allowed to lend in dollars. Both assets (deposits) and liabilities (credits) could be legally established in foreign currency. Conversion costs were minimal. Strikingly, banks were not forced to support their dollar operations with foreign currency. Argentine banks were authorized to ‘create dollars’ without backing (Rapoport 2010). Thus, during the 1990s, Argentines used the dollar and the peso indistinctly. National entrepreneurs were not the only ones who supported convertibility. North American and European bondholders also supported the plan by lending dollars to the government (Heredia 2015). The Argentine state reduced its deficit and even transformed it into a small surplus. Stability brought economic improvement.

The purchasing power of wages improved. Also, foreign credit reappeared. Menem's political support grew. The virtuous circle feedbacked itself. Everyone enjoyed the benefits of convertibility.

But the plan was flawed. On the one hand, there was the problem of currency mismatch. While banks could offer their customers the possibility of making deposits or borrowing in dollars, this was a mirage. The banks did not have dollars. Customers whose salaries were paid in pesos could not return dollars either. But people gladly accepted the mirage of convertibility. The truth is, in the Argentina of the 1990s, no one wanted to save in pesos. The laxity of financial regulation contributed to the creation of a time bomb (Caputo 2012).

The second major deficiency of the plan was related to its long-term sustainability. Argentina did not issue dollars. In these circumstances, the state could only sustain the "one-to-one" if it managed to obtain the dollars necessary to guarantee its currency's convertibility at the exchange rate established by law. In the 1990s, Argentina needed dollars for everything. It needed dollars to pay its foreign debt. It needed dollars to allow companies to remit profits abroad. It needed dollars to pay for its imports. And now it needed dollars to ensure that these could circulate in its domestic economy. But, as usual, the country's balance of payments was in deficit. The deficit was growing. Thus, Argentina became highly indebted.

The convertibility plan favored deindustrialization and worsened the trade deficit. Because one peso was worth the same as one dollar, the exchange rate was too high for Argentina's needs. Therefore, national products became too expensive. As the trade deficit increased, and the country's debt augmented massively, the sustainability of the model started to be put into question. At the beginning of the 1990s, and in contrast to what had happened in the 1980s, foreign investment and capital inflows were abundant. But in 1994 the situation started to change. The Mexico crisis of 1994 (the Tequila crisis) caused a banking crisis in Argentina that shook the financial system. Moreover, after the Mexican default, international investors began to doubt about Latin American countries' real capacity to pay their debts. Thus, after the Mexican crisis, the questions regarding the sustainability of the convertibility plan increased. By the mid-1990s, opinions were divided. For some, the tequila crisis had shown that the convertibility model was unsustainable in the long term. Therefore, they argued that the logical thing to do was to

start looking for a way out of the model now that it was still possible. For others, however, Argentina's ability to sustain the model even in the difficult circumstances of the mid-1990s was only a proof of the model's robustness. All in all, the fear of monetary chaos prevailed. After such a traumatic history trying to eradicate inflation, Argentines feared that, if convertibility was abandoned, inflation would reappear. In the presidential elections of 1995, Carlos Menem sought to position himself as the only leader capable of preserving the currency board. Opinion polls showed that the majority of Argentines wanted the continuity of the regime. Even the International Monetary Fund defended the parity between the Argentine currency and the dollar. Argentines joined their destiny to the destiny of convertibility. They did so not so much because they approved the regime but because of the fear of the consequences that the abandonment of the regime could cause.

By mid-1998, the economic circumstances became even more complicated. The crises of the Southeast Asian countries in 1997 and the Russian crisis of 1998s created doubts among international investors. Gradually they stopped investing in emerging countries. With less credit and increasingly high-interest rates, Argentina found it increasingly difficult to finance its deficit. In 1999 a crisis hit Brazil, Argentina's leading trading partner. This only made the situation worse. The situation became increasingly unstable. At the beginning of 2001, many Argentines began to take their money out of the financial system. Bank deposits in pesos or dollars were converted into cash dollars and transferred abroad. Alternatively, people hoarded their savings in cash dollars and kept them outside the financial system (literally in their houses). Because the central bank was forced by law to convert pesos into dollars, during 2001, foreign reserves dropped sharply. Between March and November 2001 twenty million dollars scaped from the financial system. To prevent the collapse of the financial system, the government enacted a set of laws that banned the withdrawal of deposits from the financial system. The measure came to be known as the 'corralito' (the little yard). The 'corralito' consisted of weekly restrictions to the amounts of money people could withdraw from their accounts in the financial system. Individuals were allowed to make transactions within the banking system, but could not withdraw more than 250 dollars per week. The monthly limit for cash withdrawals was up to 1,000 dollars per person per month.

Since Argentina's economy has a large informal sector that depends on cash, the corralito worsened the recession. It also encouraged the emergence of all kinds of transactions in which people exchanged money blocked within the financial system for cash. In most cases, those with cash benefited greatly, as they could exchange their money for a higher-value than the value of bank deposits. The second important measure imposed during the collapse of the convertibility was the 'asymmetric pesification'. In early 2002, the finance minister Jorge Remes Lenicov ordered the compulsory pesification of all financial assets in the financial system. Because the national currency devalued sharply, the measure resulted in massive losses for savers. Strikingly, the pesification converted saving deposits in dollars to pesos at a different exchange rate that loans and credits. Saving deposits were pesified at an exchange rate of 1.40 peso for each dollar. Debts higher than 100,000 dollars were pesified at the original exchange rate of one by one. As many times in the past, the measure benefited debtors and severely damaged savers. Between March and June 2002 the value of the peso continued dropping sharply. By June, one dollar costed four pesos.

At the beginning of the 1990s, Argentina had suffered inflation for about fifty years. Nobody had been able to control it. Finally, in April 1991, the government of Carlos Menem launched the convertibility plan. The plan immediately stopped the continuous rise in prices. For the first time in many decades, the country had stable prices. Soon after the implementation of convertibility, a period of intense growth of the local economic activity began. Not surprisingly, these conditions led a large part of the population to support the government. However, the plan was unsustainable in the long run. By the year 2000, the Argentine economy was again in a crisis. The state tried to refinance its debt without success. When the state froze bank deposits, close the foreign exchange market and declared the asymmetric pesification of deposits and loans Argentines exploded in anger. In December 2001, social mobilization spread all over the country. The political chaos caused the minister of finance and the president to resing. The political crisis was the most severe in the history of the country. In only one week, Argentina had five presidents and several ministers of finance and central bank governors.

Between 2003 and 2015, Argentina was governed by a sector of the Peronist party known as Kirchnerism. Between 2003 and 2007, Nestor Kirchner was president of the Nation. He was succeeded by his wife, Cristina Kirchner, who governed the country until 2015. During the 12 and a half years (three presidential terms) that the Kirchnerist party was in

government inflation reappeared. During the government of Nestor Kirchner, Argentina had an exchange rate that remained high and stable. Such an exchange-rate policy helped the national economy to be competitive. However, the reappearance of inflation in 2005 put the economic model in crisis. Between 2007 and 2015, inflation in Argentina rose again and maintained around 20% and 30%. During the two governments of Cristina Kirchner, there was no systematic anti-inflationary plan. The government resorted to well-known policies (such as price controls or wage-setting agreements), but these measures were not part of a systematic plan. Besides, the government altered public statistics and systematically reported lower inflation levels than those reported by private consultants. Thus, between 2003 and 2015, inflation became the subject of significant public controversy in Argentina. Also, since 2013, the government of Cristina Kirchner imposed severe restrictions on the purchase of dollars. As always, these restrictions led to massive protests. In 2015 Mauricio Macri was elected president. As we will see in the next chapter, his government would propose a policy to fight inflation. Again the recipe would come from the side of economic orthodoxy

6. *"We* will *give back the people their currency".* The Macri administration and a new promise of value (2015-2018)

Mauricio Macri, leader of the Argentine political coalition party Cambiemos (Let's Change), came to power on November 22, 2015, after triumphing over Daniel Scioli in the second round of the presidential elections. Daniel Scioli was the candidate of the ruling party at the time, the Frente para la Victoria (FPV, Front for Victory), the faction of the Partido Justicialista or Peronismo (Justicialist Party or Peronism) led by the former president Cristina Kirchner. The result marked a significant turning point in the country's political landscape since it was the first time in the history of Argentine democracy that a candidate who did not belong to either of the two main traditional political forces (the *Partido Justicialista* and the *Unión Civica Radical* [UCR, Radical Civic Union]) had managed to win a national election. Indeed, Macri's party, *Propuesta Republicana* (PRO, Republican Proposal), the main political force within the *Cambiemos* coalition,[63] was a relatively new party, which had been born less than 20 years earlier, directly after the deep economic and political crisis of 2001 and 2002. The party had consolidated at the local level after Mauricio Macri was appointed mayor of the City of Buenos Aires in 2007[64] and remained in power for two consecutive periods. The breakdown of bipartisanship and the defeat of *Peronismo* after twelve years of government thus opened up the possibility for a new national political force outside of the two traditional political parties to gain strength, a political force that aimed to lay the foundations of a new Argentina.

[63] The coalition party *Cambiemos* was founded in June 2015 as an opposition force to the *Frente para la Victoria* (the newest branch of *Peronismo*, associated with the political figures of Nestor and Cristina Kirchner) with an eye on the future presidential elections of October 2015. The coalition was formed by three political parties: *Propuesta Republicana*, led by Mauricio Macri; *Coalición Civica ARI* (ARI Civic Coalition), led by Elisa Carrió, and *Unión Cívica Radical*, one of the two traditional Argentine parties. Although it was a party alliance, *Propuesta Republicana* was the strongest of the three forces within the coalition. This unequal distribution of power within *Cambiemos* was mostly due to the fact that Mauricio Macri, founder of *Propuesta Republicana,* became the official candidate of the alliance in the national elections, and he had made his leadership intentions clear. Indeed, Macri announced that, in case of winning the elections, his government would not be a coalition, but rather *"the candidate who wins [and its party] are going to govern"* (Vommaro and Gené 2017)

[64] At the time of his election as president of Argentina, Mauricio Macri had been mayor of the City of Buenos Aires for two consecutive periods (from 2007 to 2015). At present his party continues to govern the City of Buenos Aires, after its third consecutive victory, under the leadership of Horacio Rodríguez Larrieta.

In keeping with a national political tradition of incoming governments with 'refoundational aspirations' (Vommaro and Gené 2017, 234), Cambiemos proposed a political and cultural 'refoundation' of the country's politics, the main goal of which was to establish a new political agenda focused on the modernization of the state. It was a pragmatic, post-ideological party, whose leaders mostly came from the social worlds of business management and non-governmental organizations. They had mostly either worked in foundations and non-governmental organizations close to the party or came from corporate business, where they had served as chief executive officers of large international companies. To a lesser extent, some had been recruited from some of the common social networks in which many of the party members tended to spend their free time, such as the soccer club Club Atlético Boca Juniors, as well as some educational networks linked to the Catholic church and to traditional elite colleges and universities of the City of Buenos Aires (Vommaro 2016). To move away from a past marked by old party ideologies and demagogic and corrupt politicians, Cambiemos political leaders defined themselves as 'newcomers into the world of politics'. In doing so, they wanted to distance themselves from old political debates, set in terms of 'left' and 'right' ideologies, and to stress the fact that they were part of a new political ethic, an ethic inspired by the idea of introducing into the state those managerial qualities typical of the corporate world. Not surprisingly, the new political elite was driven by an *ethos* of volunteerism and entrepreneurship, which they wanted to infuse into the state, thus preparing the ground for a new institutional foundation based on institutional transparency and internal efficiency. They wanted to transform the state into a proficient, flexible and modern machinery, populated by pragmatic, proactive and progressive politicians with a collective spirit and the ability to work as a team.

The project of political 'renovation' that Cambiemos sought to lead was evident from the very beginning. The composition and overall design of the new ministerial cabinets in all areas of government were enough to indicate the profound transformation that the ministries were about to experience. This new political elite comprised an overwhelming majority of men and some women, all of them relatively young, who mainly had four different professional origins.[65] Most were linked to Mauricio Macri's Propuesta Republicana party and had worked in different areas of government in the City of Buenos

[65] I base this description in the study of the composition of the initial cabinet of President Mauricio Macri carried out by the *Observatorio de las Elites Argentinas*. See Canelo and Castellani (2016a; 016b).

Aires, some connected institutions (i.e. Banco Ciudad de Buenos Aires and Club Atlético Boca Juniors),[66] and some non-governmental organizations associated with the party, such as Fundación Pensar, Grupo Sophia, Fundación Creer y Crecer. Others came from corporate positions as chief executive officers of large corporations with connections to different international markets.[67] Some had been recruited as experts in specific areas. Finally, some politicians were linked to one of the other two parties forming the Cambiemos coalition (Vommaro and Gené 2017). All in all, it was a metropolitan group of people. This characteristic had a lot to do with the fact that many of them were directly transferred from different political areas of government of the City of Buenos Aires to equivalent areas at the national level. Like other Argentine cabinets in the past, the Cambiemos team had a very high educational level. However, one of its novel features was the importance of private universities as the primary providers of the new civil servants' professional training.

An interesting feature of the new administration was the fragmentation of the economic area into four different ministries ('Energy', 'Production', 'Agroindustry', and 'Treasury and Finance').[68] According to several analysts, the reason behind such a strategy was Mauricio Macri's desire to prevent a 'superminister' of finances ever potentially overshadowing his presidential power, as had been the case at other moments in the

[66] Mauricio Macri began his political career as president of the *Club Atlético Boca Juniors* soccer club, which he chaired for three consecutive terms between 1995 and 2007.

[67] Several studies have highlighted that one of the main features of Mauricio Macri's cabinet was the inclusion of a high proportion of ex-managers of important business groups, who came to occupy central political positions. According to a report published by the *Observatorio de las Elites Argentinas*, 31% of the new public officials had once occupied a managerial position in the private sector (Canelo & Castellani, 2016). In addition, the new cabinet included leaders of the main business corporations, such as the *Sociedad Rural Argentina* and the *Unión Industrial Argentina*. When hiring these men, president Macri thus transformed the government into a space that was subject to profound and direct influence by the business world. To justify such a policy decision, members of the ruling party relied on justifications and arguments based on the unique qualities that the new members would bring to the State, which would have a positive impact on the expertise and efficiency with which decisions were taken. Moreover, it was argued that if they had built successful careers in the private sector, they were 'the best men available' to carry out the different managerial tasks within their area of expertise. Also, since they already enjoyed privileged economic positions, they would not seek to build a personal fortune at the expense of the public treasury. And, finally, as they did not come from party politics, they would have the independence to apply technocratic management criteria. However, the corporate profile involved several risks that the executive denied but which were reported by journalists, academics, and opposition politicians alike. Among them were the anti-state and pro-market bias that permeated the ideology of the ex-CEOs and managers, and the loyalties to their former colleagues in the private sector that they brought with them to the bosom of the State. This situation increased the probability of conflicts of interest and the permeability of the State to the pressures of the economic groups. On this topic see: Canelo and Castellani (2016a; 016b); Vommaro (2016); Vommaro and Gené (2017).

[68] At the end of 2016, President Mauricio Macri requested the resignation of the minister of treasury and finance at the time, Alfonso Prat-Gay, and divided the ministry into two different portfolios that were entrusted to Nicolás Dujovne (treasury) and Luis Caputo (finance).

national history. In line with what was happening in other areas of the new administration, the politicians appointed to fill the central positions in the four different economic ministries were also educated to a very high level. However, in contrast with other ministries, where the new politicians were newcomers to the world of politics, many of those who were part of the economic cabinet had mixed professional trajectories, that is, they had alternately held positions in both the public and private sectors. In the private sector, many of them had held senior positions in large financial companies and banks, as was the case of the new minister of finances Alfonso Prat-Gay, who had worked for *J.P. Morgan* in London, New York, and Buenos Aires.[69]

In the case of the Central Bank of Argentina, following a common political practice in the country, Mauricio Macri sought to fill it with men who shared his political vision. It is worth noting in this regard that although the Legal Mandate of the Central Bank of Argentina establishes that *"in the exercise of its functions and powers"* the institution would not be subject to *"orders, indications or instructions from the national executive power, nor may it assume obligations of any nature that imply to condition, restrict or delegate"* any of its functions and powers *"without express authorization of the national congress"*, the norm also states that *"the governor, the deputy governor and other members of the board will be appointed by the national executive power with the agreement of the national senate"*.[70] In practical terms, such norms have resulted in the central positions being occupied by individuals who were personally close to the president of the nation and/or to the minister of finances, and who had a high political affinity with the general line of the government. Moreover, even though this situation has not necessarily restricted the formal independence of the central bank, it has permeated its policies in such a way that it has reflected, most of the time, the guiding principles imposed by the government in office. In addition to this institutional reality, in Argentina, there is also a high turnover among officials of both the central bank and the ministry of

[69] Alfonso Prat-Gay, a 50-year-old economist trained at *Universidad Católica Argentina* with a master's degree in economics from the *University of Pennsylvania*, took over as Mauricio Macri's treasury and finance minister on December 2015. At the time of taking office he had already held numerous positions in the public sector. He had been governor of the central bank between 2002 and 2004 and national legislator (*Coalición Civica ARI)* for the City of Buenos Aires between 2009 and 2013. In addition, he had experience working in the private sector in the areas of economics and finance. Prat-Gay worked for *J.P. Morgan* in Buenos Aires, London, and New York, and was a senior analyst in several private consultant companies. He also worked as economic advisor of the Argentine multimillionaire Amalia Fortabat. Finally, he was a professor at *Universidad Torcuato Di Tella* and *Universidad Católica Argentina*.

[70] See the Central Bank of Argentina's Legal Mandate (Law 24.144) [Carta Orgánica del BCRA.; Ley 24.144], articles 4 and 7. Available at: http://www.bcra.gov.ar/Pdfs/BCRA/CartaOrganica2012.pdf.

finances, which speaks of the strong institutional instability afflicting the country. For example, in the four years of Mauricio Macri's government, the central bank had three governors.[71]

At the time of taking office, Mauricio Macri appointed nine new board members (out of a total of twelve) to the central bank, including a new governor and a new deputy governor. To govern the bank he chose Federico Sturzenegger, a renowned economist, whom he had known for several years. Sturzenegger had first served as director of the Banco Ciudad de Buenos Aires and then as a national legislator of Propuesta Republicana for the City of Buenos Aires. Besides, he had coordinated the area of macroeconomics at Fundación Pensar, Propuesta Republicana's political ideas factory. Upon joining the central bank, Sturzenegger not only sought to get rid of those members of the board who were close to the previous administration,[72] he also brought with him men of his trust, such as Lucas Llach, Demián Reidel and Mariano Flores Vidal, who would accompany him during his two and a half years in power and would become the main makers of the new monetary policy.

A new central bank[73]

The Central Bank of Argentina is the financial agent of the Argentine state. Since its creation in 1935, the central bank underwent several transformations. As of today, the

[71] These have been: Federico Sturzenegger, Luis Caputo, and the current governor, Guido Sandleris. Similarly, during the 12 years of Nestor and Cristina Kirchner's governments, the central bank had 5 governors: Alfonso Prat-Gay, Martin Redrado, Mercedes Marcó del Pont, Juan Carlos Fabrega, and Alejandro Vanolli. The replacement of board members is even more frequent. At the same time, it is worth noting that, from 2000 onwards, Argentina has had a total of 18 ministers of finance, who have held office for an average of one year each, with Domingo Cavallo holding the position longest (5 years) and Rodolfo Frigeri shortest (a total of one week, in the midst of the 2001 crisis).

[72] They were Pedro Biscay, German Feldman, and Juan Miguel Cuattromo, who were close to the former minister of finance Axel Kicillof and to the former Central Bank Governor Alejandro Vanolli. See the article published on *Infobae* on December 11, 2015, by Leandro Gabin, "Federico Sturzenegger asume en el Banco Central y habría renuncias masivas de los directores de Kicillof". Available at: https://www.infobae.com/2015/12/11/1775822-federico-sturzenegger-asume-el-banco-central-y-habria-renuncias-masivas-los-directores-kicillof/. Last access: 15.06.2019.

[73] Much of the data used for this characterization was provided by the *Observatorio de las Elites Argentinas* (UMET-CONICET), directed by Dr. Paula Canelo and Dr. Ana Castellani. The data was gathered from a set of public sources, among them: the Official Gazette [Boletín Oficial de la República Argentina], newspapers and journals with national scope (such as *Clarín, La Nación, Perfil, Página 12, El Cronista Comercial, Ámbito Financiero, Revista Mercado, Revista Apertura, Revista Noticias*, etc.), the curriculum vitae and other biographical data of the new government's public officers published in the official web pages of the respective ministries, as well as other official publications. I am deeply grateful to both directors of the Observatorio and to Julia Gentile for their generosity.

institution's primary functions are to concentrate and manage Argentinas reserves of gold and foreign currency, to execute its monetary and exchange-rate policies, and to contribute to the proper functioning of the financial market.[74] The Central Bank of Argentina is a legally independent entity that is organized into a Governorship (which comprises the Governor, the Deputy Governor, and an Alternate Deputy Governor), and a Board of Directors (integrated by the three members of the governorship plus eight additional members). The central bank also has a Supervisory Auditor and a Deputy Supervisory Auditor. Finally, there is a General Management Office, which comprises six sub-offices, plus two other offices that depend directly on the governorship (General Audit and Legal Services).

With the appointment of Federico Sturzenegger as governor of the central bank, and the arrival of his right-hand men, the board of directors consisted of: Lucas Llach and Demián Reidel were appointed deputy governor and an alternate deputy governor, respectively. Meanwhile, four new directors were appointed to the board. They were Fabián Zampone, Francisco Grismondi, Horacio Tomas Liendo and Pablo Curat. The other three members of the board were Pedro Biscay, German Feldman and Miguel Cuattromo. They were right-hand men of the former governor, Alejadro Vaniolli, and the former minister of finances, Axel Kicillof. The three men had been appointed members of the board during the previous administration. They remained in their position for a while despite Sturzenegger's displeasure since because the national senate had confirmed such positions.[75] Also, upon Sturzenegger's arrival, Juan Carlos Isi was appointed supervisory auditor. At the same time, Paola López, the only woman with a senior position, remained as deputy supervisory auditor, a position she had occupied since March 2011.

Federico Sturzenegger, the new governor of the Central Bank of Argentina, was a 49-year-old economist, married, with three children, native of the province of Santa Fe, an important city of the Argentine inland. He had begun his career in the public sector as

[74] See the Central Bank of Argentine's Legal Mandate (Law 24.144) [Carta Orgánica del BCRA; Ley 24.144], articles 1, 4 and 6.

[75] Germán Feldman and Juan Miguel Cuattromo continued in office until September 2016, when their term came to an end. Pedro Biscay, on the other hand, remained on the board until July 2017, when Sturzenegger's administration succeeded in removing him from his position thanks to a presidential decree alleging charges of unprofessional performance. Biscay was always very critical of the new administration and had openly criticized the adoption of an inflation targeting regime as well as the management of the monetary policy, which heavily relied on the issuance of short-term bills (known as LEBAC). Biscay had also severely criticized the absent role of the board of directors in highlighting the detrimental effects of balance of payments imbalances, which were ultimately related to the indebtment policy of the Treasury.

secretary of economic policy at the ministry of finances. His professional relationship with Mauricio Macri had begun in 2008, when he was appointed president of the Banco Ciudad de Buenos Aires and had deepened in the following years, in which Sturzenegger was a national legislator of Propuesta Republicana, representing the City of Buenos Aires. Before entering into politics, Sturzenegger had held several positions in the private sector, among them, he had been chief economist of the oil company YPF and private consultant for several internationally renowned organizations, such as the Inter-American Development Bank, the International Monetary Fund, the World Bank, the Bank of England, and the United Nations, among others. He also had an outstanding academic career. Indeed, after receiving his bachelor's degree in economics from a public university in Argentina, Sturzenegger had received his Ph.D. in economics from the Massachusetts Institute of Technology and had managed to establish himself as a recognized specialist in monetary economics and exchange-rate issues within the national and international academic communities.[76]

The new deputy governor, Lucas Llach was a 42-year-old economist and historian, also from Santa Fe, who had devoted a large part of his career to academic life, specializing in Argentine economic history. After completing his undergraduate degree and part of his postgraduate studies at the Universidad Torcuato Di Tella, Llach had obtained his Ph.D. in history from Harvard University. Later on, he had worked for more than ten years as a full-time professor at Universidad Torcuato Di Tella, although he had also spent time in some other academic spaces.[77] The political experience of the eccentric new deputy governor, who followed a 'Paleolithic' diet'[78] and declared himself a fan of 'barefoot running', was scarce, as well as his experience in the world of private companies.[79]

[76] Sturzenegger published both textbooks directed to the general public as well as academic articles in the field of finance and macroeconomics. His classification on exchange rate regimes (which he published together with his colleague from the *Universidad Torcuato Di Tella*, Eduardo Levi Yeyati) is well-known in the field. Sturzenegger was also dean of the Business School of the *Universidad Torcuato Di Tella*, and visiting professor at several internationally renowned universities, including *Harvard University* and *University of California* (UCLA).

[77] Lucas Llach was part-time professor at *Universidad de Bologna*, *New York University* (Buenos Aires), and *Universidad de San Andres*.

[78] A Paleolithic diet is a diet requiring the sole or predominant eating of foods presumed to have been available to humans during the Paleolithic era, mostly meat, fruit and vegetables, and nothing artificial or processed.

[79] Within the public sector, Llach had been advisor at the Argentine Ministry of Finance (2000) and a candidate for vice president during the internal elections of *Cambiemos*, during June 2015, where he had represented the *Unión Civica Radical* together with Ernesto Sanz. In the private sector, Llach had been president of *Tiptype* (a start-up focused on developing apps for android cellphones), and private consultant for different national enterprises, such as *Grupo IRSA* and *Banco Hipotecario*, among others.

Third in the line of the new governorship was the alternate deputy governor Demián Reidel. He decided to quit his job at Wall Street to take over as member of the board of directors at the Argentine central bank. *"My job was to buy and sell currencies depending on what a central bank was doing; today I'm on the other side"*, he confessed to the newspaper *Clarín* a few days after arriving to Buenos Aires.[80] His career was quite singular. After obtaining his bachelor's degree in physics from the renowned Instituto Balseiro, Demián Reidel had changed his professional life and specialized in high finances. He had a master's degree in financial mathematics from the University of Chicago and a Ph.D. in economics from Harvard University. Along with his studies, he had worked in the financial sector, first as an associate at J.P. Morgan, and after as executive vice-president at Goldman-Sachs, always on areas related to emerging markets' investments. Just like his teammates, he had been a professor at Universidad Torcuato Di Tella.

Finally, Sturzenegger had also brought along some of his closest advisors. Among them was Mariano Flores Vidal, Sturzenegger's former chief of advisors at the Banco Ciudad de Buenos Aires, who would be appointed general manager of the central bank. Agustín Collazo would be appointed general deputy manager of operations. All these five men would be the members of the monetary policy committee. They would be in charge of the main monetary policy decisions (most importantly, setting the benchmark interest-rate, which would be the main policy instrument within the new inflation targeting regime).[81] Finally, the other new board members were Fabián Zampone, Francisco Grismondi, Pablo Curat, and Horacio Liendo. They were all trained professionals with experience working in both the private and the public sectors. They were also part of the same social networks as their colleagues. Finally, Sturzenegger had also appointed Juan Carlos Isi, a career civil servant of the central bank, as supervisory auditor and Ivan Wernig, first, and Guido Sandleris, later, as representatives of the ministry of finances at the central bank.

[80] See the article published at *Clarín* on March 6, 2016 by Ezequiel Burgo "Perfil. Demian Reidel, director del BCRA. El físico y economista que dejó Wall Street por el Banco Central". Available at: https://www.clarin.com/economia/fisico-economista-dejo-wall-street-banco-central_0_4yJGcvVnx.html . Last access: 20.06.2019.

[81] On the constitution of the monetary policy committee [In Spanish: consejo de política monetaria], see: Sturzenegger, Federico. "Presentación de la metodología del régimen de metas de inflación" [In English: Presentation of the inflation targeting regime and its methodology]. Speech held at the Central Bank of Argentina, September 26, 2016, 00:31:39-00:32:42.

A new promise of value

Faithful to his literary vocation, Federico Sturzenegger began his inaugural speech as governor of the Central Bank of Argentina quoting the Spanish writer Javier Cercas: "*few things degrade us more as a political society than to practice a false ethic, an ethic in which instead of paying attention to what should really matter to those in power - the future and the responsibilities they have ahead -, gets lost in blaming others for the faults made in the past*".[82] With this quote, Sturzenegger aligned himself closely with the new Cambiemos cabinet, whose members were permanently pointing out that the new administration had come to inaugurate a new way of doing politics. According to the new political leaders, Argentina was on the verge of a new political era, an era in which politicians would no longer be looking into the past but into the future. *"We begin our government with a new spirit, a spirit that does not look into the past but into the future. We believe this is the only way to face the present [...]. Thus, we will not be seeking revenge; but on the contrary, we will put our energy in what is yet to come, we will focus on building the future we all want for our country and our children".*[83] Just as Cambiemos party members had proclaimed they would build a new country, the new officers of the central bank proclaimed they had the recipes that will allow Argentina to finally overcome its traumatic history of monetary imbalances and to build a stable monetary regime. Sturzenegger confessed during his first speech as the new governor of the central bank: "*when the president called me for this task, he told me: 'we must regain people's vote of confidence'; and he stated that my primary task would be 'to give back the Argentines their currency'".*[84]

His goals were ambitious. Indeed, he wanted nothing less than to create monetary stability in a country that, since the foundation of its central bank in 1935, had suffered all kinds of monetary disorders without ever succeeding to stabilize its currency for long-sustained periods (excluding the significant exception of the convertibility regime). He wanted

[82] Sturzenegger, Federico "Discurso de inicio y lineamientos de gestión" [in English: Initial Speech and policy guidelines]. Speech held at the Central Bank of Argentina, December 14, 2015, pp. 1. Many quotes used in this chapter have been taken from speeches given by the central bank governor, Federico Sturzenegger. In most cases I used the audiovisual version of these speeches. In those cases in which the audiovisual version was not available I used the written version. I quote either the time of recording or the page number, depending on which version has been used. All quotes have been translated from Spanish by the author.
[83] Ibídem, pp. 1.
[84] Ibídem., pp. 2.

nothing less than to create monetary stability in a country that, since the end of the Second World War, had been mercilessly beaten by high and almost continuous inflation; a country that, during that same period, have had five different national currencies and more than a dozen of provincial quasi-currencies; a country that had suffered two hyperinflation crises, five confiscations of bank deposits, and a significant amount of exchange-rate shocks. As I showed, all these circumstances had fostered the development and the strengthening of a close, long-lasting, and conflictive relationship between the domestic currency and the US dollar. But the new board did not seem intimidated by the circumstances. Its members trusted deeply in the power of their monetary models and in their capacity to easily translate the concepts and notions extracted from books and papers into effective tools that would help them correct the imbalances of the Argentine economy. Not only they had no doubts they would successfully achieve their goals, but, even more importantly, they had a clear-cut and uncomplicated diagnose of which were, in their views, the causes of Argentina's long-lasting imbalances. In particular, they believed that the previous administration had neglected its responsibility over monetary policy opting for financing the fiscal deficit by printing new money. This situation had ultimately led to an unsustainable environment of high inflation.[85] From now onwards, however, they will set back the country's monetary policy into its right course and watch over the value of the currency. Their ultimate goal was to provide the country with a stable and reliable currency, which in their own eyes simply meant *"to keep inflation low, and to have a free-convertible currency"*.[86] As I will show in the following, such an approach to the idea of currency stability was somehow new in the history of Argentine monetary policies.

The new members of the board were confident of their goals. However, the willingness to eradicate inflation for good was nothing new in Argentina. In the last two chapters, I showed how, since 1952, the different Argentine governments had tried everything that economic theory had proposed to them to eradicate inflation without ever achieving long-lasting results. Moreover, from the 1970s onwards, and in a world that did not offer any precise and standardized treatment against inflation, local specialists had ended up

[85] Sturzenegger, Federico "Los primeros 100 días de un Banco Central que vuelve a ocuparse de sus objetivos primordiales" [In English: The first 100 days of a Central Banks that takes care of its primary tasks]. Speech held at Bloomberg Argentina Summit, April 5, 2016, recording time 00:01:12-00:02:33.
[86] Sturzenegger, Federico "Discurso de inicio…". Speech held at the Central Bank of Argentina, December 14, 2015, pp. 2.

making use of each and every tool available in the international economic toolkit to fight it: from orthodox plans, based on monetary and fiscal adjustments, to heterodox plans, which proposed to freeze prices and salaries, as well as occasionally complementing them with other tools drawn from different theories. But beyond good intentions and extensive expertise, the only long-lasting result of this uninterrupted succession of anti-inflation policies had been to transform the country into an exceptional economic laboratory (Heredia, 2016). Within this endless succession of experiments, trials and errors, all based on different interpretations and diagnoses on the causes of inflation and with divergent proposals on the most effective ways to fight against it, there had been, however, some persistent ingredients, such as the search for foreign capital, the request of conditional support from international financial organizations and, above all, the use of a specific nominal anchor, namely, the nominal exchange rate between the Argentine peso and the US dollar. Indeed, as I have described in detail in the previous chapter, many stabilization plans in Argentine history used the exchange rate as the primary tool to coordinate inflation expectations during a phase of transition towards price stability. However, despite the popularity among local economists of using such a strategy, the new administration of the central bank considered that pegging the exchange rate to the dollar was not without costs. In their view, using this strategy would only be an easy 'shortcut' which, even if useful for reducing inflation in the short-run, will end up creating long-term rigidities that will force Argentina into a new economic crisis. Sturzenegger would indeed make this argument in several of his speeches:

> *"Historically in Argentina, especially when we are about to engage in a process of disinflation, like we are about to do now, [...] it has been very tempting to use the exchange-rate as a nominal anchor; to say 'let's fix the exchange-rate and in doing so the exchange-rate will help us coordinate inflation expectations [during a phase of transition] towards a lower inflation level'. But, just as this option is very tempting - because fixing the exchange-rate allows us to quickly coordinate expectations -, it ends up being a trap, because it puts the Argentine economy, or any economy that relies in such a strategy, in an inflexible position, [in a position] that when the moment comes that one has to make corrections [...] there are no margins to do them, or at least there are no margins to do them without a very severe recession as we have seen at the end of*

the convertibility regime crisis [...]. So, even when fixing the exchange-rate makes lowering inflation easier [...] in the end [this strategy] leads to more economic rigidity and the situation can only be solved by a crisis. And this is what we are trying to avoid. [Exchange-rate pegging] was used in the 1970s, you know the examples, it was used [in the 1980s] during the Radicalismo government - the Austral Plan also relied on that strategy -, it was used during the convertibility regime and it was used, I think, during the last government. And always, in the end, the economy was unable to generate proper [adjustment] mechanisms. So, [during our administration] there is an attempt to build a new institutional framework which is a [different] institutional framework [...]. And this is more difficult at the beginning because we have to coordinate inflation expectations without having that element (the exchange-rate) as a coordination tool, which means that [we need to constantly reaffirm] the central bank's willingness [to lower inflation] and explain what we do, [our monetary policy] to the public".[87]

But, as Sturzenegger rightly pointed out, with the monetary authorities no longer targeting the exchange-rate, another mechanism was needed to anchor expectations. To this end, the central bank's new authorities embraced inflation targeting. And they did so despite the objections that this monetary policy framework was not a useful one to actually lower inflation and that it should only be implemented once inflation was already low. Just like in other countries, the new policy required that the central bank announced specific inflation targets and commit to them. Also, the monetary authorities needed to adopt a very transparent communication strategy, which included the regular publication of an inflation report[88] in which the central bank should present its assessment of the current economic conditions and its views on the prospects for inflation and growth, and explain the rationale behind recent monetary policy decisions. At the same time, the new policy will provide a new nominal anchor: the inflation target. This target was no more than a fixed inflation-rate, to which the central bank was committed, and which would serve the

[87] Sturzenegger, Federico "Informe al Congreso de la Nación sobre los alcances de las políticas monetarias, cambiarias y financieras en ejecución" [in English: Report to the Congress on the scope of the economic, monetary and financial policies implemented]. Speech held at the Argentine National Congress, May 18, 2016, recording time 00:09:03-00:10:59.
[88] In Argentina the inflation report was known as Monetary Policy Report.

purpose of guiding economic agents' expectations on future inflation, thus helping to tie down the level of prices in the long-run. In this sense, the purpose of the monetary authorities was to establish a new coordination tool, one which would help Argentines not to fall into the trap, once again, of relying on the price of the US dollar to try to defeat inflation. At the same time, the adoption of an inflation-targeting monetary policy framework meant that price stability would have to become the main goal of the new central bank's monetary policy, and that the benchmark interest-rate would be its main monetary policy tool. The specific price of the dollar, on the other hand, would no longer be controlled by the central bank, but left for the market to regulate. Overall, the new authorities' main aim was to build *"a new institutional framework"*, an institutional framework *"based on the Central Bank's credibility and not on the non-permanent anchor provided by the exchange-rate at some specific point in time"*.[89] In their views, such institutional framework would be crucial in helping Argentina to build *"a different macroeconomy, a more stable macroeconomy, one in which domestic prices would eventually dissociate from exchange-rate movements"*.[90] It was thus time to leave behind the old recipes and try out new directions, time to *"do something that Argentina had not yet tried out"*.[91]

This change on the overall strategy of national monetary policy could not be more clearly expressed than it was in the words of the central bank governor during his first press conference:

> *"We have left the peso holder helpless for too long. [...] [From now onwards] the main focus of this institution will be to strengthen our currency, which is nothing more than to achieve an inflation-rate which is in line with international parameters. To make the concept clearer, I affirm that this institution will pay more attention to the evolution of the inflation-rate than to the price of the dollar, which in the last years has become an obsession. To care for the value of the peso means to make sure that inflation is low, not that the price of the dollar is constant. We should not be paying attention to the amount of dollars we can purchase*

[89] Sturzenegger, Federico "Informe al Congreso…". Speech held at the Argentine National Congress, May 18, 2016, recording time 00:29:04-00:29:30.
[90] Ibídem, recording time 00:29:30-00:29:48.
[91] Ibídem, recording time 00:06:35-00:06:44.

with a peso. Instead, we should be paying attention to the amount of real goods we can purchase with a peso, which is ultimately what workers care for. Our reaction function (as is called in academic circles) should be following the changes in the evolution of good's prices, not the changes in the price of the dollar. This change of perspective requires that we redirect our monetary policy towards an inflation targeting policy framework, combined with a managed but floating exchange-rate".[92]

Indeed, in the views of the central bank's new authorities, the new monetary policy framework and the accompanying free-floating exchange-rate regime were considered to be more sustainable in the long- run than an alternate system based on totally or partially pegging the exchange rate. Moreover, and perhaps more importantly, the chosen policy inspired trust because it was broadly accepted within international circles as the most effective way to keep inflation low.[93] Therefore, once again, and just like many other times in the past, the new ruling elite claimed that the formula to succeed in the battle against inflation was to follow the international recipe book. According to the new authorities of the central bank, inflation targeting was the monetary policy framework which *"all successful countries"*[94] had, those countries that Argentina should imitate. "*We are not inventing anything here. [Indeed, this is] the monetary policy used in Chile, is the monetary policy used in Colombia, is the monetary policy used in Brazil, is the monetary policy used in Australia, is the monetary policy used in New Zealand, is the monetary policy used in Canada, is the monetary policy used in the United States, is the monetary policy used in England. That means that we are not bringing here an invention that we just came up with, but [that we are putting into practice something that is used all over the world]".*[95] Quite paradoxically, the implementation of rigid exchange-rate regimes that, according to the new administration, had cost Argentina so much, had also been a decision in line with the international recipes of the 1990s. But nowadays recipes

[92] Sturzenegger, Federico "Discurso de inicio…". Speech held at the Central Bank of Argentina, December 14, 2015, pp. 2-3.
[93] There is a wide set of literature that shows that, when compared to other regimes (i.e. exchange rate targeting, monetary targeting), inflation targeting has been very successful in keeping inflation low for sustained periods, both in industrialized and emerging economies. See for example Mishkin, 1999.
[94] Sturzenegger, Federico "Presentación de la Política Monetaria" [in English: Presentation of the Monetary Policy], Speech held at the Central Bank of Argentina, April 28, 2016, recording time 00:17:58-00:18:00.
[95] Sturzenegger, Federico "Informe al Congreso…". Speech held at the Argentine National Congress, May 18, 2016, recording time 00:06:49-00:07:36.

had changed and the modern world prescribed a new anti-inflation antidote: inflation targeting, with financial integration and exchange-rate flexibility; this was *"the most effective and long-lasting remedy [...] which would allow Argentina to achieve long-awaited price stability, while [ensuring] sustainable economic growth"*.[96]

As expected, in a country with an institutional tradition so biased towards the use of monetary policy frameworks which relied on exchange-rate pegging, questions emerged from several directions. While economists argued among themselves about the ability of the central bank to stabilize economic agents' expectations by relying exclusively on the use of the benchmark interest-rate, and legislators raised their concerns about the economic recession that would follow from maintaining high interest rates for such a long period; journalists seem to ignore the turnaround of the national monetary policy and continued to report, with formidable detail, the daily variations in the price of the US currency. As if all that was not enough, the new authorities acknowledged that the very same institution they governed was biased towards the implementation of anti-inflation policies based on exchange-rate stabilization. "*We are convinced [...] that these are both a monetary policy framework and an exchange-rate regime that will be useful for Argentina [...], [but in order to properly implement them, it is necessary that we are able to] de-dollarize the mind of the central bank itself, [...] and that we manage to make domestic inflation the main focus of this institution, instead of this focus being the exchange-rate, as it was so many times in the past"*.[97]

But all in all, and despite the difficulties, the new policymakers had no doubts about the suitability of these policies for a country like Argentina. Not for one second, they lost their conviction, but continued to affirm that the new policies could be successfully implemented, if only a minimum of order, consistency and coherence was maintained on the part of policymakers.

> *"There is no country in the world (with an independent central bank) that tried to lower inflation using inflation targeting and failed. There is not. Therefore, if we fail, we would be very bad policy makers. We are not*

[96] Sturzenegger, Federico "Los primeros 100 días…". Speech held at Bloomberg Argentina Summit, April 5, 2016, recording time 00:08:10-00:08:35.
[97] Sturzenegger, Federico "Presentación de la Política Monetaria". Speech held at the Central Bank of Argentina, April 28, 2016, recording time 00:19:07-00:20:07

inventing anything; but we are just looking at the world. […] I realize that [our society] is a very skeptical society, is a society that has been used to live with inflation for a very long time; it is a society that does not have trust. So, what I want to tell to the Argentine society is that this [monetary policy] has worked [in other places]; this [monetary policy] has been successful. And that is the reason why I insist, for example, in [talking about] the case of Israel, [a country] which went from an annual inflation-rate of 450% to 0% inflation in just a few years. Right there, on that podium, just a few weeks ago, was the governor of the Central Bank of Israel, and she was explaining to us how, today, the inflation-rate in Israel remains in 0%, even when she has been insistently trying to get it to 2%. But [quite paradoxically] today she cannot bring the inflation-rate from 0% to 2%. [It seems unbelievable, right?] […] So, my insistence is a message to the people, to the businessmen, to the whole society, that Argentina can do this; it can do this perfectly well, because many other countries did it, from Israel to Peru, from Australia to England. So there is nothing that stops us from following the same trajectory".[98]

Now, even though Sturzenegger's beliefs were fervent and his intentions were firm, the problem remained that he underestimated the task at hand. Indeed, Sturzenegger wanted something that was not so easy to achieve in Argentina. In short, he wanted the people to stop making calculations about the amount of dollars they could purchase with a peso, and to focus instead on making calculations about how many goods they could purchase with a peso. That is to say, he wanted people's attention to shift from the exchange-rate to the ability of the central bank to achieve its own inflation target and thus tame inflation. But, this apparently very simple shift in monetary policy's general orientation actually required a deep transformation of the valuation scheme with which Argentines were used to measure their own currency. In such situation, the new authorities should not have overlooked the fact that one of the main long-lasting consequences of the endless series of anti-inflation policies that had been implemented by past governments, was that Argentines had learned to rely on the US currency as a reference value with which to measure both the present and the future value of their own currency. Thus, by relying on

[98] Sturzenegger, Federico. "Presentación del Informe de Política Monetaria" [in English: Presentation of the Monetary Policy Report]. Speech held at the Central Bank of Argentina, October 18, 2016, recording time 01:09:36-01:11:05.

the use of the exchange-rate as the main coordination tool to help tying down prices in the long-run, past governments had fostered the widespread use of the exchange-rate between the Argentine peso and the US dollar as a reference point; a situation which, in time, led the dollar to become the reference point for the peso's own value. Over time, the close relationship between the two currencies had only strengthened insofar as cash dollars - as well as other goods whose prices were denominated in dollars, typically real estate - had become the most common saving options of Argentines. Therefore, if the new monetary authorities wanted to restore and maintain the value of the national currency, thus encouraging monetary trust among citizens, first of all they needed to understand where such trust was grounded. Such a task, in turn, required that the authorities understood in which terms citizens acknowledged and measured money's value.

Naturally, I do not want to imply that the inflation-rate was not a crucial variable for Argentines. I showed, since 1946, the lack of ability of the national currency to maintain its purchasing power over time in terms of goods was perceived by the population with increasing distress. Indeed, inflation partially determined how much people distrusted the value of their national currency in the long-run. But the inflation rate was not the only measure Argentines used for assessing the peso's loss of value. Since citizens were very much used to save in cash dollars and other dollarized options, they were very much concerned with calculations about the number of dollars they could purchase with their money.[99] This situation, in turn, made the exchange-rate a very sensitive price. However, the new authorities intended to reduce Argentine's money valuation scheme (which included two variables, the inflation rate, and the exchange rate) to a single variable scheme. They believed that, by adopting a free-floating exchange-rate regime, the central bank would guarantee a sufficient degree of volatility in the price of the US dollar, so that, after some time, domestic prices would no longer follow the exchange-rate.[100] What was needed, they argued, was "*to make 'the market' used to the dynamics of a free-floating exchange-rate regime, thus helping to dissociate domestic prices' behavior and inflation expectations from the dynamics of the exchange rate".* That would be, in the view of the new authorities, *"the most effective way (which will, of course, require some*

[99] Of course, these two variables (the inflation-rate and the exchange-rate), are related. Typically, the interaction between both variables is expressed by the *exchange-rate pass-through coefficient*.
[100] On this topic see: Sturzenegger, Federico "Presentación de la Política Monetaria". Speech held at the Central Bank of Argentina, April 28, 2016, recording time 00:19:32-00:19:46.

work) to downplay the exchange rate's central role in the formation of inflation expectations".[101]

For more than two years, the central bank of Argentina tried to create trust in the currency on these completely new grounds. However, as I will show in the following, this trust proved unruly. As long as the cravings of the Argentines for US dollars were more difficult to curb than the economic team would have wished, the successful implementation of inflation targeting found strong limits. Indeed, if on the one hand these limits arose from the central bank's own inability to formulate credible inflation targets that could become an effective anchor of inflation expectations; on the other hand, the unhealthy obsession of Argentines with the dollar, cultivated for decades, emerged as a second limitation that ended up undermining the attempt to establish a different monetary policy framework. Actually, the monetary authorities were never able to divert Argentine citizens' attention from the variations of the exchange-rate. Thus, despite their efforts to convince Argentines to stop using the price of the dollar as their main reference point to assess the state of the economy, and despite their insistence that, in the new monetary policy scheme, the specific value of the exchange-rate was no longer a policy objective; the questioning over the peso-dollar exchange-rate's value never stopped. No matter what the monetary authorities did, at every presentation, at every discourse, at every press conference, journalists, academics and financial experts alike kept relentlessly asking which was the expected value of the dollar for the upcoming months, or whether the monetary authorities considered that, due to high inflation, the exchange-rate was lagging behind, thus increasing the chances of a currency shock. And, even though the central bank's authorities insisted, again and again, that there was no such thing as an expected value for the dollar in the upcoming months, and that Argentina's exchange-rate regime was a free-floating one; their answers sounded extremely insufficient. And the worst was yet to come.

Starting on December 28, 2017, right after a press conference in which the central bank announced a relaxation of its own inflation target, a sudden loss of confidence hit the Argentine financial market hard and speculative foreign capital began to leave the country en masse. Immediately, the exchange rate between the Argentine peso and the US dollar

[101] Sturzenegger, Federico "Los primeros 100 días…". Speech held at Bloomberg Argentina Summit, April 5, 2016, recording time 00:13:18-00:13:40.

skyrocketed. Once again, the crisis soon occupied the front page of all national and international newspapers. At the national level, television shows were packed with specialists who tried to explain to a broad and unskilled audience the reasons behind the sudden rise of the exchange-rate, in an attempt to hold back widespread unease. Meanwhile, social networks exploded with comments and jokes about the skyrocketing price of the dollar. And as the days went by, and as the value of the Argentine currency continue falling with no end in sight, widespread monetary unrest led Argentines to withdraw, once again, their deposits from the banks. Despite the central bank's efforts to build a new monetary rationality, the crisis made dramatically clear that the price of the dollar remained a fundamental variable for Argentines. The fragility of inflation targeting was then more evident than ever, and so was the new monetary authorities' inability to freely implement a free-floating exchange-rate regime, as their monetary models foretold.

Towards a new monetary pedagogy: the establishment of inflation targeting in Argentina

To go back in time to the beginnings of inflation targeting in Argentina, it was on March 1st, 2016, that the central bank of Argentina began its transition towards inflation targeting. At the time, the new monetary authorities were seeking what others in their place had sought many times: to stabilize the national currency. But this time, Sturzenegger and its team had chosen inflation targeting as the new monetary policy framework. In their view, such a choice would allow Argentina to achieve long-awaited monetary stability. And to be fair such choice was not entirely surprising. In fact, around the world, inflation targeting as a fruitful monetary policy framework has been growing in popularity in recent years. What is more, the truth is that when it comes to controlling inflation, the empirical records of inflation targeting do not look bad at all. Indeed, most of the countries that adopted inflation targeting as their main monetary policy managed to keep inflation low, without any significant cost in terms of growth. However, it is important to note that, most of the time, central banks waited until inflation was under control before formally introducing inflation targeting. The main reason for this delay is the difficulty for central banks to forecast inflation and hit the inflation target in conditions of high and volatile inflation. In such circumstances, the risk of losing credibility from target misses is very high (Hammond 2012). As a consequence, with a few exceptions - such as Turkey and Guatemala, which used inflation targeting to effectively reduce their

inflation-rate in a significant manner-, we know very little about the efficacy of inflation targeting as a policy to fight against chronic inflation (Libman & Palazzo, 2019).

However, despite all the warnings, the new authorities of the central bank were convinced that inflation targeting was the *"right monetary policy"* for Argentina to adopt, a policy that will provide "*a new coordination mechanism for price makers and price takers within society"*;[102] and that, in doing so, will help the central bank "*to coordinate economic agents' expectations and to bring them into line with the parameters already prestablished by the monetary authorities"*.[103] Thus, despite the uncertainty surrounding the country when the new authorities took office, Sturzenegger and his team set themselves ambitious goals.

Indeed, at the beginning of 2016, uncertainty about the future was growing in Argentina as the country faced several challenges. On the one hand, there was the problem that the inflation-rate was already in danger of reaching even higher levels than in the previous years. In fact, given that during the second half of 2015, the previous administration had put in place a strong expansionary monetary policy aiming at financing the treasury, the monetary market was flooded with cash surpluses. This situation, in turn, prevented the central bank from freely setting its inflation targets for 2016. Thus, during their first three months in office, and in order to rectify the situation, the new monetary authorities put in place a very tight monetary policy, which sought to drain the market of the excessive pesos. However, it was already clear that no anti-inflation policy could work as long as the central bank had to continue issuing money in order to finance the treasury. In concrete terms, this meant that no matter which anti-inflation policy the government pursue, this policy had to be accompanied by fiscal tightening. Now, in a context of economic recession and political fragility, in which the government was facing increasing social pressures, Mauricio Macri and his economic team had little room for maneuver. Against this backdrop, the new politicians decided that fiscal tightening had to be *gradual*. The new fiscal policy would thus be based on two fundamental pillars. First, the reduction of public expenditure would be effective but gradual, which in practice meant that the central bank had to continue financing the treasury for some time. However, the value of these

[102] Sturzenegger, Federico "Presentación de la metodología…". Speech held at the Central Bank of Argentina, September 26, 2016, recording time 00:03:23-00:03:32.
[103] Sturzenegger, Federico "Panorama económico y financiero: perspectivas nacionales e internacionales". Speech held at Universidad de Tel Aviv, Buenos Aires, August 30, 2016, pp.3.

money transfers from the central bank to the treasury would be limited to a specific amount which, according to the monetary authorities, would not jeopardize the announced inflation targets.[104]

At the same time, the second pillar which ensured the sustainability of such *fiscal gradualism* was the possibility to cover any additional financial needs that the treasury could have through international loans. In these circumstances, the fact that Argentina had recently regained access to international financial markets allowed the government to potentially satisfy any pressing additional need for financing - one that was above the amount already provided by the central bank -, by accessing to international funding. This possibility, in turn, gave the government greater freedom to decide the pace at which it wanted to reduce its own deficit. All in all, in the views of the new monetary authorities, the overall fiscal and monetary program would make it possible to gradually reduce the fiscal deficit while, at the same time, lowering inflation and reactivating economic growth.

However, even if the government decided that fiscal tightening would be gradually implemented, this still meant that public spending needed to be severely limited. For this reason, shortly after taking office, Mauricio Macri's new economic cabinet put in place a series of measures whose main aim was to reduce the fiscal deficit. One such measure was an aggressive policy of subsidy reduction which, overall, sought to eliminate state subsidies to private companies in some key areas. Thus, to the extent that the government stopped financing many private companies which provided public services, the costs of many services (i.e., electricity, gas and water supply, sewage and drains maintenance, fuel and urban transport, among others) were transferred to the people, causing sharp price increases which made the monetary authorities' fight against inflation infinitely more difficult.[105]

[104] Specifically, in 2016, financing from the central bank to the treasury was limited to 160 billion pesos (equivalent to 2.5% of GDP). At the same time, during 2017 and 2018 the central bank agreed to transfer the treasury an amount of pesos equivalent to 1.5% and 1% of GDP, respectively. The rationale for consenting these transfers was that, to the extent that the process of disinflation was expected to be gradual, there was still some room in the money market for monetary expansion. Put differently, the assumption was that the money market would be capable of absorbing these transfers without the need of any sterilization process.

[105] Only in the first quarter of 2016, price increases on the costs of many public services were exorbitant. This is especially true for the Autonomous City of Buenos Aires and its metropolitan area. Indeed, the average increase on the cost of the water supply was 300%. The average increase on the cost of electricity supply was 250%. The average increase on the cost of gas supply was 195%. Also, the costs for

A second challenge for the new economic cabinet was posed by the lack of reliable statistics in the country. In fact, by the time Mauricio Macri took office, in December 2015, Argentina's public statistics were facing an unprecedented crisis of confidence, circumstances which led the new president to publicly state that the country was in a situation of 'national statistical emergency' (Daniel and Lanata Briones 2019). The origins of such a crisis have to be traced back to 2007, the point in time when the Kirchner administration took control of the *Instituto Nacional de Estadisticas y Censos* (INDEC, National Institute of Statistics and Censuses), and replaced many of the most recognized and experienced public officials in the institute. As a result, many methodological procedures were severely modified and the credibility of many of the most fundamental national indexes - such as the consumer prices index and the unemployment and economic growth rates -, was severely damaged. Consequently, from 2007 onwards, while official statistics continue to lose credibility, a great number of alternative indexes proliferated. Some of these alternative indexes were published by national or provincial state agencies which were still credible, while private consultants provided others. But in any case, the fact remained that when the new administration of the central bank took office, there were no official inflation indexes in the country; a situation that made it extremely difficult for the government to put in place an inflation targeting policy framework right away. Certainly, not only the lack of trustworthy official inflation indexes limited the central bank's capacity to study the economic dynamics, and thus, its ability to set realistic future inflation targets. Moreover, it also made it extremely difficult for society as a whole to be able to judge whether the new policy was successful. There can be no doubt that, from the moment they took office, the new authorities of the central bank had significant challenges ahead. However, this did not stop them from setting ambitious goals, which, as I will show in the following, they had to renegotiate many times later on, in a process of constant back and forth in which they tried to convince both 'the market' and the society of the credibility of the anti-inflation policy, a goal which they never actually entirely achieved.

In the light of such uncertain economic circumstances, the new administration decided that the transition towards a new and fully-fledged inflation targeting monetary policy

transportation (bus and urban train) rose 100%. In this sense, we must not lose sight of the fact that, since subsidies for public services were concentrated in the metropolitan area of the City of Buenos Aires, the impact of price increases was different in the different regions of the country.

framework would have to be done in three phases.[106] The first phase began in December 2015, when the new authorities of the central bank took office and extended until February 29th, 2016. Within this initial phase, known as the *correction of imbalances phase*,[107] the main aim of the new monetary policy was to prepare the ground for a smooth transition to the new policy framework. With this purpose in mind, the new authorities of the central bank put in place a set of measures oriented towards two main goals: to reestablish the equilibrium of the money market, on the one hand, and to unify the foreign currency market, on the other. Accordingly, between December 2015 and February 2016, the central bank's new authorities pursued a very tight monetary policy, which considerably decreased the amount of money in circulation within the Argentine economy. At the same time, they lifted all restrictions to the purchase of foreign currency in record time, a policy mostly aimed at unifying the currency market and putting an end to both the illegal dollar market and the exchange-rate gap between the so-called 'official' and 'blue' dollars. It was only in March 2016, after these first three months of initial stabilization, that the Central Bank of Argentina began its formal migration towards a fully-fledged inflation targeting policy framework, a policy framework in which the main monetary policy tool would be the benchmark interest rate. This second *phase of transition* lasted approximately nine months during which the central bank sought to safeguard a smooth and successful transition towards fully-fledged inflation targeting. This transition would be fully completed by January 2017. However, the shift to the new monetary policy framework was not without complexities. Indeed, such shift required the central bank to convince a skeptical society about the advantages of the new policy for achieving a long-awaited goal: to bring inflation down and to ensure monetary stability. But considering that during the past seventy years, the Argentine society had witnessed more than a dozen unsuccessful attempts to bring inflation down, its people were very suspicious of anti-inflation policies in general. However, to be fair, it must also be acknowledged that, compared to the old recipes, the new anti-inflation policy brought some interesting innovations along.

[106] On this topic see the following speeches by Federico Sturzenegger: "La gestión de la política monetaria". Speech held at the Consejo Profesional de Ciencias Económicas de Buenos Aires, April 26, 2016; "Presentación de la Política Monetaria". Speech held at the Central Bank of Argentina, April 28, 2016; and "Presentación del Informe de Política Monetaria". Speech held at the Central Bank of Argentina, May 12, 2016.

[107] Sturzenegger, Federico "Presentación de la Política Monetaria". Speech held at the Central Bank of Argentina, April 28, 2016.

A first innovation of the new monetary policy framework was that, for Argentina, just like for other countries, embracing inflation targeting meant making price stability the main focus of its monetary policy. In this regard, the views of the central bank's new monetary authorities were completely in line with the prevalent governing international consensus on monetary policy, which clearly states that price stability is the greatest contribution that a central bank can make to the process of economic development. Of course, it goes without saying that this specific view on monetary policy did not always prevail. In fact, such a view is a product of the last half-century, a period in which central banks had significantly redefined how they approach their macroeconomic stabilization functions. Actually, as recently as the 1970s, the picture was very different from today and views still diverged across advanced economy central banks with regard to the efficacy of monetary policy in delivering price stability. Some, such as the Bundesbank and the Swiss National Bank, were already committed to using monetary measures to control inflation. But others, such as the Federal Reserve and various European central banks, remained more pessimistic in their outlook, believing that monetary policy was an inefficient means to tame inflation and that other policies should be better employed. Illustrating this view, Fed Chairman William Miller observed in his first FOMC[108] meeting in March 1978 that *"inflation is going to be left to the Federal Reserve and that's going to be bad news. An effective program to reduce the rate of inflation has to extend beyond monetary policy and needs to be complemented by programs designed to enhance competition and to correct structural problems"*.[109] However, from late 1979 onwards – with Volcker's assumption of the Fed chairmanship– central banks converged towards a new consensus and took ownership for fulfilling their inflation mandates.

Within this new international consensus, disbelief regarding the efficacy of monetary policy to tame inflation was replaced by a new paradigm which presupposes that sustainable growth cannot be separated from price stability, and that price stability, in turn, depends exclusively on a credible and committed monetary policy. In other words, those who adhere to this new consensus share a series of convictions, such as: that low inflation is a prerequisite for economic growth, that inflation itself is an exclusively

[108] FMOC is the abbreviation of Federal Open Market Committee, which is responsible for open market operations of the Federal Reserve.
[109] Praet, Peter "The ECB's fight against low inflation: reasons and consequences" [en español: "La lucha del Banco Central Europeo contra la baja inflación: razones y consecuencias"]. Speech held at the Luiss School of European Political Economy, Rome, April 4, 2016, pp. 1.

monetary phenomenon and that, as a consequence, it can be effectively controlled by using monetary policy instruments alone. Indeed, within such a paradigm, inflation occurs when there is more money within the economy than people want[110]; therefore, the only thing that a central bank needs to do in order to bring inflation down is to reestablish the equilibrium in the money market. That is why, as long as the central bank succeeds in setting up a scheme where money supply and money demand balance each other, prices will accommodate naturally, switching off the mechanisms that fueled inflation.

Faithful defenders of this new international consensus in monetary policy, the new authorities of the Central Bank of Argentina were certain that their main contribution to the process of national economic development was to achieve and maintain price stability. Moreover, in their view, delivering price stability depended exclusively on the central bank's ability to pursue a credible and committed monetary policy: *"All over the world inflation has been defeated. And this defeat has been inflicted because central banks were committed to this task. What is more, monetary policy instruments have proved to be sufficient for achieving this goal, leading us to conclusive results"*.[111] Thus, unlike their predecessors, who had followed an expansionary monetary policy aimed at increasing government spending, maintaining full employment and promoting economic growth in the short-run (more in line with a Keynesian paradigm), the central bank's new authorities were convinced that delivering price stability was the most important contribution that the central bank could make for achieving long-term economic growth. In this situation, the new authorities had two main aims: to bring inflation down and keep it low. As for the central bank's other responsibilities as established in its legal mandate (i.e. to promote financial stability, full-employment, economic development and overall social welfare), should be subordinated to this first objective of price stability.

> *"I would like to be very clear with regard to this specific point, because it has to do with what we consider to be our main duty [as the central bank's new authorities]. Our ability to contribute to the well-being of the Argentine society is to ensure price stability and, in doing so, to*

[110] This is so because the model assumes that, ultimately, the price level is the representation of money's price. As a consequence, if there is more money within the economy than people want, the price of money will fall, or, in other words, the price of goods (relative to money) will rise.
[111] Sturzenegger, Federico "Panorama económico y financiero…". Speech held at Universidad de Tel Aviv, Buenos Aires, August 30, 2016, pp.3.

> *safeguard the purchasing power of our national currency. Indeed, no other goal is feasible. This definition is central, because we have moved away from a central bank that thought that it could do everything and that it had nothing to do with inflation, towards a central bank that thinks it can do almost nothing but to lower inflation. It is thus easy to understand why, in this new phase - and in order to fully comply with the goals set in the central bank's legal mandate - we have given absolute priority to gradually bring down the inherited inflation-rate, thus ensuring monetary stability".*[112]

A second and relatively new element of the new anti-inflation policy was that it required that the central bank had statutory independence, a feature that, as we will see, was not so easy to achieve during the two and a half years that Sturzenegger and his team were in office. Indeed, to a great extent, it was the widespread perception of the central bank's lack of independence that ultimately precipitated Sturzenegger administration's dramatic early end. However, it remains a widely-held idea within economics that inflation targeting central banks should be independent of government influence, a feature that, in theory, allows them to generate credible inflation expectations. But this independence of monetary policy from political oversight was not always a requirement. Actually, the need to create and maintain independent central banks, whose policies are insulated, even shielded, from direct political oversight, grew in importance side by side with the increasing role of price stability as the main monetary policy goal of developed economies central banks. Thus, since the 1980s, while monetarist ideas gained salience within economics, monetary policy converged towards this new ideal of independent central banks. That means central banks in which monetary policy decisions are isolated from the immediate financial needs of the state, and where the monetary authorities are expected to rely on clear, explicit and preferably quantitative rules (i.e. inflation targets or the Taylor rule, for example), and to communicate them to the public in a transparent manner, thus allowing both, 'the market' and the society to assess the consistency or their actions with the broader objectives of monetary policy. Often, the literature on central banking distinguishes between 'goal independence' (i.e. the central bank has autonomy in setting the goals of monetary policy), and 'instrument independence', (i.e. the central

[112] Sturzenegger, Federico "Los primeros 100 días…". Speech held at Bloomberg Argentina Summit, April 5, 2016, pp. 3. I quote the written version because the audiovisual version is not audible in that part.

bank conducts monetary policy to achieve the inflation target independent of government influence). In practice, of course, the distinction is less clear-cut.

Accordingly, and just like in other inflation targeting countries, in Argentina, the turnaround of the country's monetary policy towards inflation targeting required an independent central bank; a central bank committed to protect the long-term value of the national currency and, thus, able to take whatever actions were needed to hit its own inflation targets. Such independence, it was argued, would also be a guarantee that the monetary authorities would not pursue an expansionary monetary policy intended to promote short-run economic growth. Actually, and even though during this period the Central Bank of Argentina did not actually have goal independence – since the inflation targets were jointly determined by the central bank's authorities together with the ministry of finances –, Sturzenegger and his team were confident that the central bank would always be able to keep its operational independence, and to freely conduct its monetary policy isolated from political oversight. So, despite the fact that Argentina's history does not have many examples of such a high degree of central bank independence, and perhaps a little surprisingly, the central bank's new authorities were confident about their ability to maintain their independency: "*This institutional design is a novelty in Argentine history which, in a nutshell, shows that we now have an independent central bank that sets its own inflation targets and that uses all its monetary policy toolkit to meet these targets. In this new institutional framework, monetary policy will not accommodate itself to inflation expectations; on the contrary, it will act upon these expectations, thus helping to make the actions of economic agents consistent with the inflation targets set by the central bank".* [113]

Finally, the third innovation of the new anti-inflation policy was the introduction of a numerical inflation target as the nominal variable which would help to coordinate the future inflation expectations of the private sector and, in doing so, to tie down the price level in the long-run. Therefore, the introduction of a new nominal anchor meant that the central bank would no longer rely on the exchange rate as the main coordination monetary policy tool. "*It is important to emphasize this particular element, because historically Argentina has always mixed its exchange-rate policy with its anti-inflation policy. And,*

[113] Sturzenegger, Federico "Política Monetaria, Inflación, Crecimiento". Speech held at Fundación de Investigaciones Económicas Latinoamericanas (FIEL), Buenos Aires, September 29, 2016, pp. 7.

even today, there is still a great temptation to keep using the exchange-rate as the main instrument to stabilize the economy [...]. And here we are, yet again, debating how to fight against inflation. So it's obvious that it's time to try a different recipe".[114]

As we have already mentioned, the new authorities of the central bank were convinced that reorienting economic actors' attention towards the dynamics of prices in the domestic market would produce good results in the long-run. In these circumstances, they were prepared to work round the clock in order to make sure that Argentines would stop using the nominal peso-dollar exchange-rate as the main variable with which to assess the overall health of their national currency. And even if this turnaround of the country's monetary policy was not an easy one, they felt completely up to the task. *"When I speak of the path we are about to follow, I speak of a path where the exchange-rate will float, and where there will be a new anchor for [inflation] expectations, [an anchor] that will be provided by the central bank and by its commitment to price stability. If we achieve our goal, Argentina will have better monetary institutions, which will allow it to grow steadily. In this new scheme, domestic prices will follow the parameters pre-established by the central bank; and in doing so they will allow the exchange-rate to finally play its stabilizing role"*.[115] So, once more very much in line with the prevalent governing international consensus on monetary policy, the new authorities of the central bank claimed that Argentina needed a free-floating exchange-rate regime. In their view, such a scheme would bring great benefits. On the one hand, it would help the national economy to better cope with possible external shocks, while at the same time, preventing some imbalances *"from growing more than they should"*.[116] Last but not least, a more volatile exchange-rate would help to de-dollarize the domestic economy over time. Thus, in Sturzenegger's opinion, even if in the short-run inflation targeting posed great challenges, it would eventually lead to *"a more sustainable macroeconomic scheme, one which would be much more appropriate for the Argentine economy in the long-run"*. [117]

[114] Sturzenegger, Federico "Estrategia del BCRA". Speech held at the Instituto Argentino de Ejecutivos de Finanzas (IAEF), May 11, 2016, pp. 4.
[115] Ibídem, pp.5.
[116] See the interview to Federico Sturzenegger published at the newspaper *Perfil* on January 28, 2018, by Jorge Fontevecchia, "Ahora, a cumplir la meta del 15%". Available at: https://www.perfil.com/noticias/politica/ahora-a-cumplir-la-meta-del-15.phtml. Last access: 13/10/2019.
[117] Sturzenegger, Federico "Los primeros 100 días…". Speech held at Bloomberg Argentina Summit, April 5, 2016, recording time 00:10:50-00:11:05.

> "*I don't want to minimize the topic, because it is true that we, Argentines [...], live with our own history, right? And the Argentine history has always been that stabilization programs were based on the use of the exchange-rate [as a nominal anchor]. So this has always been a one-way street. I mean, the exchange-rate was used as a reference point to anchor [inflation expectations]. Hence, as soon as the inflation process kept on going, it forced the nominal exchange-rate to appreciate. And in these circumstances we were always wondering: 'and now what? How do we get out of here? How do we get out of this situation?' Only through deflation. And this is what is different [in the new policy framework]. And it is precisely this change that I am trying [...] to emphasize all the time. [I am trying to show you] that this situation can change. [...] And I think that it is very important to understand that this central bank's main goal is not to keep the exchange-rate within a certain value, this central bank's main goal is to keep the inflation-rate within a certain value".*[118]

The new monetary authorities had placed their bet and sealed their fate. From now onwards, in order to effectively defeat inflation, they would have to convince Argentines of four key points. First, that currency stability and price stability were synonymous. Second, that since inflation was essentially a monetary phenomenon the central bank's monetary policy toolkit was all that was needed to bring prices down. Third, that the main tool in this fight against inflation would be the benchmark interest-rate. And, fourth, that, in the new scheme, economic agents had to turn their attention from the nominal peso-dollar exchange-rate to the ability of the central bank to meet its inflation targets. In this, the ability of the new policy makers to put in place a successful inflation-control policy depended, to a great extent, on the exercise of a new and effective *monetary pedagogy*. Indeed, as Jaqueline Best (2019) has rightly pointed out in a recent paper, for any specific inflation-control policy to work it needs to be both understood and made to be credible. This, in turn, means that social actors (and especially certain key actors) need to learn that this is 'how inflation works' in a specific monetary paradigm, and to put into place a whole range of supporting practices that reflect and reproduce this conviction. In other

[118] Sturzenegger, Federico "Presentación del Informe de Política Monetaria". Speech held at the Central Bank of Argentina, April 18, 2017, recording time 01:19:38-01:21:31.

words, for any given anti-inflation policy to work (i.e. quantitative rules, income policies, fiscal policy), social actors need to believe that, due to certain particular causes (i.e. monetary, wage-driven, demand-driven), such policy is the best way to manage inflation credibly (Best 2019, 628). In this sense, in order to be effective, monetary policies do not necessarily have to be accurate, but they do have to be widely accepted. It is for this reason that, when studying any given monetary policy and its effects, we must recognize that a monetary policy rule only makes sense in the context of a broader, deeply sociological, construction of what the economy is and how it works. Economic theories play a fundamental role here since they provide credible narratives about what the different economic phenomena are, what causes them, and how to manage them successfully (Beckert 2016; Holmes 2009).

Fully aware of this reality, the central bank's new authorities knew that, if they wanted the new anti-inflation policy to succeed, they needed to educate Argentines and teach them that 'this was how inflation worked' under the new monetary paradigm. In this way, society would not only be able to understand the new monetary policy but, even more importantly, it would also believe in its efficacy. Therefore, as is typical for inflation targeting central banks, the new monetary authorities established an encompassing communication strategy whose ultimate goal was to hold the central bank accountable for its conduct of monetary policy. As such, this communication strategy consisted of different vehicles of communication, which became a key piece of the central bank's new pedagogical exercise. The main objectives were to communicate monetary policy decisions, to make explicit the rationale behind them, and to always reinforce the idea that all these decisions were consistent and coherent with the overall goal of meeting the inflation targets.[119] Thus, with the adoption of inflation targeting, periodic

[119] There were different occasions for communication with the press. Typically, the main vehicle for communicating monetary policy was the *Monetary Policy Report*, which was published quarterly (in January, April, July and October each year). This report was accompanied by a press conference in which the members of the *Monetary Policy Committee* summarized the most relevant data and explained the rationale behind the main monetary policy decisions. The presentations of the monetary policy report were held in the Central Bank's conference room and journalists from different media as well as financial experts were invited. The conferences were also streamed through the official Youtube channel of the Central Bank of Argentina. There were also some other written vehicles of communication. The most important was the 'Lebac Communiqués', which was published every Tuesday afternoon and which contained a weekly overview of the monetary policy decisions. There was also a *Monthly Monetary Report* which was accompanied by an editorial note and described the state of the money market. In addition, in December each year, the Central Bank of Argentina published the *Monetary Policy Objectives* for the following year. Finally, once a year, the governor Federico Sturzenegger reported and explained the most important monetary policy decisions to the National Congress. There were also some additional occasions were both the governor and the deputy governor shared the most recent monetary policy decisions with specific

communication with both the press and with financial analysts became a central part of the new public officials' daily work. Again, to the extent that the central bank's new authorities were deeply aware that, in order to succeed, they needed economic actors to understand the logics behind their decisions and to believe in their efficacy, they utilized these vehicles of communication as real pedagogical opportunities. Accordingly, they made use of each speech, each press conference, each presentation of the monetary policy report, as an opportunity to explain the rationale behind monetary policy decisions, to point out which measures had been taken to influence the path and pace of disinflation, educate the public and correct those interpretations that were mistaken.

Now, considering that Argentina had been fighting inflation for almost seventy years, the topic naturally had considerable salience within the public debate. This situation, in turn, added complexity to the pedagogical endeavor of the new monetary authorities. In fact, one of the main consequences of the endless succession of inflation-control policies was that public debate on the drivers of national inflation had been flooded with as many different concepts and theories about inflation as there had been anti-inflationary plans in Argentina. Where on the one hand, economists had contributed transforming the public debate into an increasingly technical space where countless concepts coexisted in a confused tangle of ideas, on the other hand, the media had also contributed to this exercise of diffusion, bringing debates on the causes and consequences of inflation closer to the public, giving rise to a melting pot of divergent explanations that permanently circulated in the national debate. Additionally, politicians, who through their speeches and public appearances had sought to make society understand the logics behind whatever was the anti-inflation policy of the day, had also helped to make economic theories become more accessible to the people. The result of all these actions was to turn inflation into the object of a feverish polemic that had been growing for more than half a century (Heredia 2015; 2018). As was only to be expected, imposing a clear narrative on the subject was not an easy task in the midst of so much contestation. However, as we have already stated, the success of the anti-inflation program depended on the new monetary authorities being able to convince economic actors of the efficacy of their policy. And for that, imposing a theory of inflation was an unavoidable step.

audiences, such as trade unions, professional networks, etc. Most of these speeches can be found on Federico Sturzenegger's personal blog. Available at: https://www.fsturzenegger.com.ar/actividad-bcra. Last access: 13/10/2019.

Contested futures: the performance of inflation targeting in Argentina

The new authorities set to work right after taking office. The new monetary policy, however, was not officially announced until April 28th, 2016, at a press conference which took place in the central bank's conference room and lasted about an hour.[120] There, in front of an audience full of journalists and financial experts, Sturzenegger presented the general guidelines of the new monetary policy. In doing so, he also sparked off a wider and heated debate about the drivers of the Argentine inflation and the better ways to fight against it; a debate that would turn into a fierce, long-lasting battle of ideas, which would end with the monetary authorities being both exhausted and discredited. The success of the new monetary policy was conditional on the authorities creating a new monetary-anchor, a reference point that should become a clear and precise guide for economic agents' inflation expectations during a phase of transition. This monetary-anchor, which for many decades had been the price of the dollar, would now be the inflation target established by the central bank. Therefore, one of the first steps for the new monetary authorities was to establish explicit quantitative inflation targets, targets that *"could offer the Argentine society a stable and predictable unit of value"*,[121] and could become a clear indication of what was the level of inflation that the central bank was looking for. In doing so, these targets would lead economic agents' future inflation expectations in the direction of the objectives set by the central bank. Moreover, once the targets had been set, the central bank had to actually reach those inflation targets, thus helping Argentines to begin to recover their trust in the long-lasting value of their national currency. In this sense, the assumption of the monetary authorities was that, as soon as Argentines could see that inflation was following a downward and well-ordered path, and could verify that the national currency was gradually recovering its capacity to maintain its value over time; they would slowly regain their peace of mind and a climate of greater financial stability would prevail.

[120] Sturzenegger, Federico "Presentación de la Política Monetaria". Speech held at the Central Bank of Argentina, April 28, 2016.
[121] Sturzenegger, Federico "Presentación de la metodología…". Speech held at the Central Bank of Argentina, September 26, 2016, recording time 00:03:35-00:03:38.

Under these circumstances, in early 2016 the central bank together with the ministry of finances defined a long-term inflation target, which set an ultimate goal for the process of disinflation: to achieve an annual inflation rate of 5% by the end of Mauricio Macri's presidency in December 2019. However, given that during the two years prior to the arrival of Sturzenegger and his team to the central bank the annual inflation-rate in Argentina was above 25%,[122] a very steep disinflation process was needed in order to meet this long-term target. In this sense, the monetary authorities knew that they had to provide concrete guidelines on the path and pace of disinflation expected by the central bank. Therefore, aside from this single long-term inflation target, they needed to set different targets with different time frames. Thus, as the months went by, the monetary authorities set three additional annual inflation targets and some monthly inflation targets which, together, provided intermediate reference points, thus giving a clear signal on the rhythm of disinflation expected by the central bank. Yet, only one of these intermediate annual targets was announced at the conference of April 28, 2016. In fact, and even though the new authorities were aware that setting concrete intermediate inflation targets was crucial for the success of the new anti-inflation policy, the reality was that in Argentina inflation targeting began without clear inflation targets. As we have already stated, this was because of the lack of trustworthy inflation indexes made extremely difficult for the new monetary authorities to know exactly what the actual inflation-rate was, and to set realistic inflation targets for the near future.

But no matter how atypical the situation in the country was, the new administration of the central bank knew that establishing explicit inflation targets was an unavoidable step within the monetary policy framework they had chosen. As a result, and despite the lack of reliable national inflation indexes, by the end of April 2016, Sturzenegger was forced to provide a 'provisional' annual inflation target for 2016, which consisted of bringing the annual inflation rate 'as close as possible to 25%'. In contrast, the inflation targets for 2017 and 2018 were only announced in September 2016 and set in terms of ranges.[123] For 2017, the monetary authorities set an annual inflation target of between 12% and 17%, while for 2018 they set an inflation range target of between 8% to 12%. As for

[122] According to the statistical data published by the Argentine province of San Luis, cumulative annual (from January to December) reached 33.5% in 2014 and 27.8% in 2015. According to the statistical data published by the Autonomous City of Buenos Aires accumulated annual inflation reached 32.6% in 2014 and 24.3% in 2015.

[123] Sturzenegger, Federico. "Presentación de la metodología del régimen de metas de inflación". Speech held at the Central Bank of Argentina, September 26, 2016.

measurement, like in most inflation targeting countries, in Argentina the monetary authorities chose to use the headline measure of the *consumer prices index* (hereinafter CPI) as their main target measure. The choice largely responded to both practical and operational reasons. Indeed, the CPI is available on a monthly basis, whereas other measures, which might be preferred for theoretical reasons, such as the GDP deflator, are only available quarterly. Also, while the core measure is less volatile and may be more responsive to the policy rate, the headline measure has the overwhelming advantage of being familiar to the public, which makes communication easier. In particular, given some regional disparities in prices in different regions of the country, the index used by the Central Bank of Argentina was the headline measure of the CPI provided by the *Instituto Nacional de Estadísticas y Censo*s (INDEC, National Institute of Statistics and Censuses) with the largest geographical coverage.[124]

The truth is that inflation targeting in Argentina had a hesitant beginning. Indeed, during the first months of 2016, not only were inflation targets provisional, but the discourse of the monetary authorities was also extremely ambiguous. If on the one hand, Sturzenegger tried to always look confident that Argentina would succeed in reducing inflation, at the same time he constantly repeated that, given the lack of reliable statistics, he could not actually provide an accurate quantitative inflation target for 2016. However, he provided a provisional quantitative inflation target. Thus, during the conference on April, 28th, 2016, he stated that, even if this was *"a very particular year in terms of measuring the inflation-rate, […] the two goals we set ourselves for this year are to bring the annual inflation-rate as close as possible to 25% and to start guiding inflation expectations, so that in 2017 they will be within the range we have established […]. This is the main point we want to make here today, this is the goal to which we are committing ourselves"*.[125] In this way, by setting themselves their first monetary policy goal, the monetary authorities began a long journey, which continued for approximately two and a half years, and in which they would try to restore the central bank's long-lost credibility.

[124] Indeed, the Central Bank of Argentina made clear that the target measure would be the consumer prices index with the greatest geographic coverage, from those periodically published by the INDEC. Between May and December 2016, this index was the IPC-AMBA: the consumer prices index calculated for the Metropolitan Area of the City of Buenos Aires (a district which includes not only the City of Buenos Aires but also part of the province of the same name, which is adjacent to that district). On the other hand, from January 2017 onwards, the INDEC began to publish a national inflation index, which was then subsequently adopted by the central bank as the target measure used to evaluate if the central bank met the inflation target.

[125] Sturzenegger, Federico "Presentación de la Política Monetaria". Speech held at the Central Bank of Argentina, April 28, 2016, recording time 00:33:00-00:33:35.

With this objective in mind, one of the first tasks on which they focused their attention was the study of the inflation process and its tendencies. But given that the INDEC had not yet resumed the periodical publication of the main national economic indexes at the beginning of 2016, the central bank's analysts had to rely on alternative indexes. Some of these alternative indexes were periodically published by state agencies that were still trustworthy, while others were provided by private consultants.[126] In particular, analysts at the central bank mostly relied on disaggregated inflation indexes (indexes which distinguished core inflation from seasonal inflation, as well as inflation due to adjustments in prices regulated by the government), which were all published with different frequencies (daily, weekly or monthly). With this information, the central bank's analysts tried to distinguish persistent from temporary trends,[127] to make a diagnosis of the general situation and to identify broad inflation dynamics. In turn, the monetary authorities relied on these assessments to take policy decisions on how to meet the inflation target. "*When we take a [monetary policy] decision we usually have a lot of information, and that information sometimes goes in one direction, sometimes goes in another direction; so in the end we cannot take all this information into account, we cannot react to every number, because that would be very unstable. What we have to do instead is to visualize an overall inflation process, to imagine how this process is going to continue, and to convince ourselves of what are, in our views, the main dynamics; only then can we take a decision, based on an overall assessment. Indeed, it is only when we observe the process in the long-run, that all the numbers align and the path of the inflation process becomes very clear"*.[128]

[126] The central bank's analysts used inflation indexes published by state agencies that were still credible, specifically those periodically published by the Argentine provinces of San Luis, Córdoba, Mendoza and the Autonomous City of Buenos Aires. At the same time, they used inflation indexes provided by private consultants, such as *PriceStats* and *Latin American Concensus Forecast*. The national indexes published by the National Institute of Statistics and Censuses (INDEC) were only available from May 2016 onwards. So it was only after that date that they were also used by the central bank to evaluate the inflation dynamics. Moreover, as of July 2016, the central bank resumed its *Survey of Inflation Expectations* (REM), on a monthly basis. This information was also incorporated to the analysis of inflation dynamics.

[127] The central bank used both, headline inflation indexes as well as disaggregated versions of these indexes (when available). These disaggregated indexes include, for example, seasonal inflation indexes (which show the monthly variation of prices that do not vary uniformly throughout the year) and regulated prices indexes (which measure the monthly variation of prices regulated by the government), as well as core inflation indexes (which exclude volatile components such as food). In general, economic models assume that core inflation gives a better idea of the underlying inflationary pressures.

[128] Sturzenegger, Federico "Presentación de la Política Monetaria". Speech held at the Central Bank of Argentina, January 25, 2017recording time 00:09:45-00:10:24.

But in order to be able to act upon observed trends, thus channeling inflation into the desired and pre-established path, the monetary authorities needed to translate their monetary policy goals into a whole set of technical practices ultimately designed to manage the price level. Put differently, in order to meet its inflation targets, the central bank had to operationalize these targets, to translate them into a series of specific technical practices that were supposed to bring about the disinflation process. And again, the selection of these specific technical practices ultimately depended on a theory of inflation. In this regard, and as we have already pointed out, the views of the new monetary authorities on inflation were eminently monetarist. Famously synthesized by Milton Friedman, the monetarist model states that "long-continued inflation is always and everywhere a monetary phenomenon that arises from a more rapid expansion in the quantity of money than in total output" (Friedman, 1974: 2). In line with this idea, the new authorities of the Central Bank of Argentina understood that the main cause of Argentina's high inflation rate was the excessive money issuance carried out by the previous administration with the purpose of financing a high public deficit. Thus, to the extent that this increase in the amount of money in circulation within the economy had not been accompanied by an equivalent increase in total output, the consequence had been the rise of inflation. As a result, according to the central bank's new authorities, all the central bank had to do in order to completely correct the situation was to put in place a contractionary monetary policy.

Moreover, in such a view, the setting of benchmark interest rate was the only technical instrument required to successfully manage the price level.[129] Indeed, by setting the policy rate, the monetary authorities would be able to act upon the real economy through three different transmission mechanisms.[130] Overall, and beyond the specificities of each of

[129] Typically, within inflation targeting, the monetary authorities can decide to use a specific interest rate of the economy as the benchmark interest rate, or the interest rate corresponding to some central bank operation itself. In the case of Argentina, during the two and a half years of inflation targeting, the central bank used two different policy rates. Between March and December 2016, it used the interest rate of the LEBACS (central bank notes sold every thirty-five days). As of January 2017, it used the interest rate of the PASES (notes sold exclusively to the financial system that were liquidated every seven-days)

[130] These mechanisms were three. First, a direct channel in which the benchmark interest rate impacted directly on the market interest rates, liquidity and credit; and indirectly on aggregate expense and inflation. Second, the exchange-rate channel, which was captured by the transfer coefficient. And third, the channel of expectations, in which each decision of the central bank on the specific level of the benchmark interest rate, influenced the inflation expectations of the economic agents. Ii is important to notice that the magnitude and relative importance of each one of these mechanisms depends on the structural characteristics of an economy (i.e. the degree of credit depth, or the opening of the economy) and on the form of its institutions. In Argentina the most important channel is the exchange rate. To understand the Argentina central bank's perspective on this topic, see section 6 of the Monetary Policy Report [Informe de Política Monetaria] May 2016, pp. 42-43.

these transmission mechanisms, the benchmark interest-rate would act as a signal of how tight the monetary policy was. Thus, if inflation was above the target, the monetary authorities would raise the policy interest rate, thus decreasing the amount of money within the economy, slowing prices down and moderating inflation expectations. On the other hand, if the inflation rate started to decline or was consistently below the central bank's targets, the monetary authorities would reduce the policy rate. All in all, during the two and a half years of Sturzenegger's administration, Argentina pursued a contractionary monetary policy. In fact, during the whole period, the authorities maintained the policy rate on a nominal value that was around 30%, with the ultimate aim of having a positive real interest rate for deposits of about 4% per year.

But at this point it is important to understand that, even if the credibility of the central bank was, to a large extent, tied to its technical capacity to control inflation; the ultimate source of this credibility was its political capacity to effectively govern economic actors' inflation expectations and to impose a common image of the future. Indeed, if the central bank's new authorities wanted to restore monetary trust, they needed to persuade the population, to make them believe that Argentina was actually heading towards a future in which inflation went down, the central bank succeeded in keeping money's value over time and in fostering economic growth, and in which a climate of prosperity and harmony prevailed. In other words, if the central bank's new authorities wanted to restore monetary trust, being able to grasp the underlying dynamics of the inflation process and to act upon them was not enough. The reason for this was that the ultimate source of monetary trust lay not in the central bank's technical capacity to diagnose the dynamics underlying inflation, but in its political capacity to govern the inflation expectations of the population and to impose an image of a desirable and reachable monetary future in which the national currency recovered its value. Thus, above all, the success of the new anti-inflation policy depended on the success of the central bank's *policy of expectations*. Why was this the case? Basically because, to the extent that inflation targeting regimes are based on the anticipation of potential threats - threats upon which the central bank has to act today, to prevent them from materializing in the future -, the reality is that the actual results of such a monetary policy can never be confirmed. Indeed, if a central bank is successful in impeding potential inflation outbursts, those outbursts will never occur, and therefore it will never be possible to know whether it was indeed the intervention of the central bank that helped to prevent these outbursts, or whether there was no danger of such outbursts in the first place, in which case monetary policy would not have made any difference at

all. The point here is that central bank interventions must prevent the realization of that potential future upon which the authorities decided to act in the first place. So, since it is not possible to observe whether inflation targeting actually helps delivering price stability, the question of whether such policy is successful remains an open one. Still, given that inflation targets have performative effects, some have argued that the most relevant thing for the success of such regimes is, precisely, that the monetary authority is capable of governing economic agents' future expectations and of convincing them that the economy is gradually moving toward an economically stable future without inflation.

Aware of this reality, Sturzenegger knew that his main task was not to anticipate the emergence of purely economic threats and to act upon them, thus being capable of actually govern inflation dynamics. Above all, his main task was to govern the inflation expectations and the economic fears of Argentines, to calm down their anxieties and channel their thoughts and emotions into a desirable and fruitful direction. And in this regard, his efforts to persuade the population were constant. From the very beginning, the new governor of the central bank sought to convince Argentines that the country was slowly moving into a monetary future which was different from the past and from the present, a monetary future not only desirable but also reachable, and in which the national currency recovered its value. *"They say we can divide countries in two types, those who remember and those who imagine. Personally, I think Argentina has already spent too much time remembering. It's time to change our attitude and start imagining. And today I want to invite you to imagine an Argentina without inflation"*,[131] the governor stated in front of a group of experts. He longed for Argentines to imagine an Argentina where the inflation-rate was gradually falling from an average annual rate of 25% in 2016, to an average annual rate of 15% in 2017, of 10% in 2018 and of 5% in 2019. He longed for Argentines to imagine they could finally live in "*a normal country, [...] in a country where people are no longer wondering how much prices will increase, [a country] where Argentines have no interest in hearing the governor of the central bank talk about inflation anymore, [a country] where macroeconomics is no longer a concern, but a firm and invisible support for the development of each person"*.[132]

[131] Sturzenegger, Federico "Política Monetaria, Inflación, Crecimiento". Speech held at the Fundación de Investigaciones Económicas Latinoamericanas (FIEL), Buenos Aires, September 29, 2016, pp. 1
[132] Sturzenegger, Federico "Panorama económico y financiero…". Speech held at Universidad de Tel Aviv, Buenos Aires, August 30, 2016, pp. 9-10.

But considering that by the beginning of May 2016, the annual accumulated inflation rate was already reaching 14%, meeting an annual inflation target of 25% seemed highly unlikely, and Argentines had little trust this could be achieved. Used to decades of political ups and downs and tired of the sterile announcements of the politicians of the day, Argentines were not easily convinced. On the contrary, they needed proof that, this time, anti-inflation policies would bring the results announced by the monetary authorities. To make matters worse, as time went by, and further inflation figures were published, mistrust grew. Indeed, when the INDEC resumed the publication of the official inflation indexes in June 2016, the news were as devastating for the population as for the monetary authorities. According to official indexes, the monthly inflation rate in the metropolitan area of the City of Buenos Aires during the month of May had reached an alarming 4.2%. That is, a number much higher than the central bank's monthly target of 2%. Thus, despite the efforts of the monetary authorities to persuade Argentines of the efficacy of the anti-inflation policy, it was very difficult to win their trust when it was so evident that the monetary policy was not meeting its goals. In the following months the inflation rates failed to improve and the overall situation worsened. In fact, depending on which indexes we use, by July 2016, the accumulated annual inflation rate in the City of Buenos Aires was already reaching 28.3%, while in the rest of the country this figure reached between 21% and 27%. Thus, with such figures, the annual inflation target of 25% was little more than an expression of desire.

Inflation was not going down and the situation was tense. Indeed, despite the efforts of the monetary authorities to formulate credible and convincing explanations of the main causes and the potential solutions to the problem of inflation, journalists, financial insiders and opposition politicians alike expressed serious doubts regarding the central bank's capacity to grasp the complexity of the inflation process and to effectively fight against it. Such was the case, for example, of Senator María Graciela De la Rosa (FPV) who, during Sturzenegger's first presentation to the National Congress in May 2016, severely questioned the effective capacity of the new monetary policy to control inflation.

> *"Here we have a philosophical, ideological and political discussion about the nature of inflation as a monetary phenomenon. [...] I believe that inflation is not a monetary phenomenon, it does have components that have to do with monetary policy, with money issuance, but I*

believe that inflation is a structural, global, social, political, economic phenomenon that has to do with interest bidding, it has to do with... with so many things in Argentina. And above all it is also [a phenomenon that in Argentina is] very much linked to the dollar, [because] this is an absolutely dollarized country. [...] [So] when you talk about using the interest rate as an anchor to curb inflation or to lower inflation to a single digit, it seems [to me that this is] too ambitious. I do not believe that the central bank, with a monetary policy [like the one you are proposing] and using a [single] tool, such as the benchmark interest rate, can manage to lower inflation on its own, because, [I insist], I believe that this is a much more complex economic phenomenon". [133]

And indeed, one of the most pressing problems that the monetary authorities faced was that Senator Maria Graciela de la Rosa was not alone in her doubts. In fact, many senators and deputies from parties opposed to the government raised similar questions. To make matters worse, it was not just the congressmen who had doubts. For instance, recognized specialists from various national scientific and technical organizations also pointed out that the monetary authorities had incorrectly diagnosed the causes of inflation, and, therefore, they also did not believe in the proposed solutions. The international community also expressed misgivings. But despite the criticism, Sturzenegger and his team did not give in. With stubborn insistence, the governor of the central bank repeated, almost like a mantra, that even admitting that there could be many factors fueling inflation, the fact remained that, in order for any inflation process to continue, the central bank needed to validate this dynamic by increasing the amount of money in the economy accordingly. Therefore, as long as this did not occur and the central bank maintained its contractionary monetary policy, the inflation process would eventually stop, regardless of the role played by other factors.

"We can talk a lot about inflation, about whether inflation is a monetary or a non-monetary phenomenon. When one wonders where does inflation come from, for example, distributive struggles [are

[133] Sturzenegger, Federico "Informe al Congreso…", Speech held at the Argentine National Congress, May 18, 2016, intervention of the senator María Graciela De la Rosa (FPV), recording time 01:54:07-01:55:39.

always mentioned]. And [whenever I face these questions] I always give the same answer, that is, that distributive struggles are universal; we find them in absolutely every society in the world. [Indeed], I don't see that the owners of the supermarkets in Brazil or in France act differently nor have different interests [to the owners of the supermarkets in Argentina]. I don't see that [in other countries the companies] don't fight for their own interests, in fact these are even the same companies. [...] [So that cannot be the ultimate explanation]. [What I mean by this is that] there cannot be sustained processes of inflation if the amount of money does not validate such processes".[134]

Thus, even though inflation was still higher than they expected, the monetary authorities were optimistic and confident that by keeping interest rates sufficiently high, inflation would eventually fall. And even though they admitted that there were many challenges ahead and that there could be several ups and downs during the process of disinflation, they kept stressing that the underlying dynamics showed that inflation in the country was already going down and that the population simply needed to be patient. *"Just as we know that inflation can be effectively reduced with an adequate monetary policy, we also know that disinflation processes are complex, mainly because we have to coordinate the expectations of economic agents among themselves and [to bring these into line with] the path of disinflation planned by the authorities*".[135] But to the extent that the actual inflation figures were still higher than the central bank's targets, mistrust became widespread and the people had more and more questions.

The discussions between the monetary authorities and the journalists that took place during the three press conferences held between April and August 2016 in the central bank's conference room are a clear example of the general state of affairs. Restlessness and nervousness flooded the room. One after the other, journalists from different media asked Sturzenegger with concern why the forecasts were wrong. Such was, for example, the case of journalist Ricardo Blotini from *Canal 9*, who in May 2016 said to Sturzenegger: *"I would like you to explain [the current situation to the people], because*

[134] Sturzenegger, Federico "Informe al Congreso…", Speech held at the Argentine National Congress, May 18, 2016, recording time 02:10:20-02:11:50.
[135] Sturzenegger, Federico. 2016. "Panorama económico…". Speech held at Universidad de Tel Aviv, Buenos Aires, August 30, 2016, pp. 3.

[...] I hear you state that inflation is going down; but what I see all day long on the streets, is - at least in my view and in the views of the people around me -, that this is not the case, [and that in fact] inflation [is not going down]. [...] [On the contrary], the real inflation rate, the inflation rate that people suffer every day, has been 20% in the four months since Mauricio Macri took office".[136] And only a month later, in June 2016, journalist Javier Blanco from the newspaper *La Nación* expressed similar concerns: *"The widespread feeling, not only among the analysts but among the citizens as well, is that, so far, the central bank has been more successful in anchoring inflation expectations than in actually lowering inflation. And in the streets, tiredness is evident. So I want to know what is your level of commitment [regarding what you have promised, given the circumstances]? And what is your [level of] commitment for the future".*[137] And while they could not deny the reality, the monetary authorities remained firm in their conviction that the general trends showed that inflation in Argentina was going down. Moreover, they claimed that, even if inflation in the City of Buenos Aires was stubbornly persistent, other parts of the country were already showing a decline in the inflation rate.

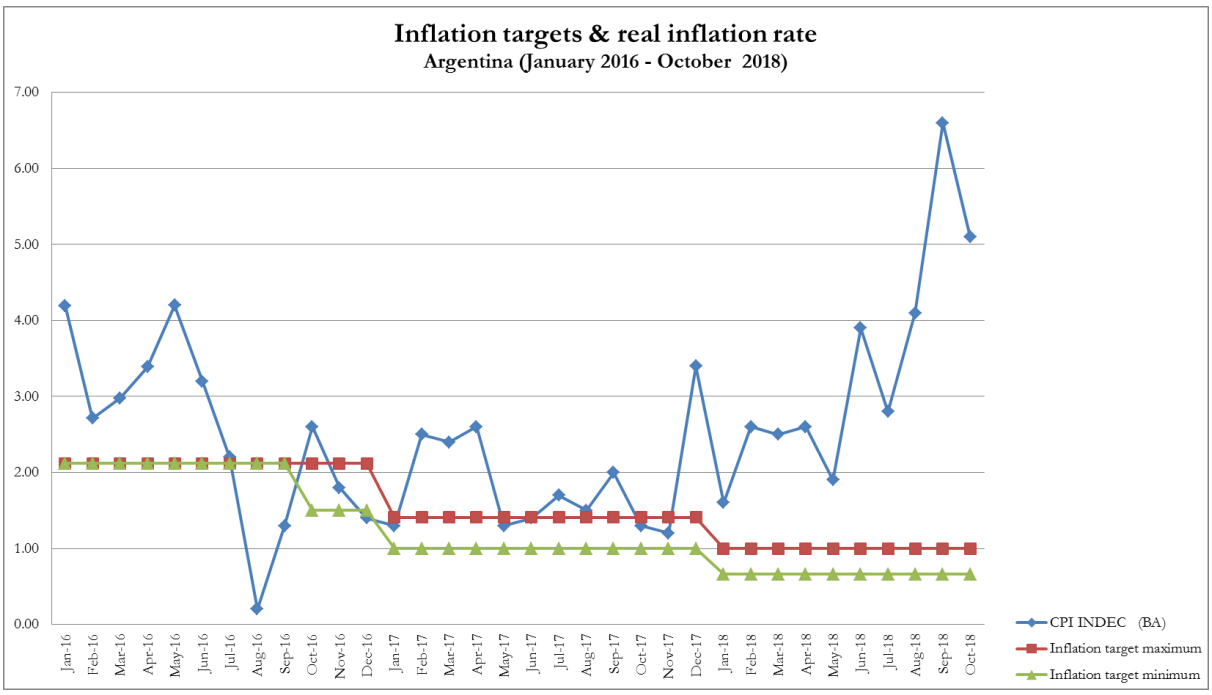
> *"Well, obviously, our commitment is always greater. But I think that it was very important that during this presentation we could finally show you, [as we did], the numbers in both places, the City of Buenos Aires itself and also its metropolitan area, as well as the numbers in the Argentine inland; because really the numbers during the month of June are significantly different [in the different districts]. In fact, we are talking about an inflation rate of 2% in Mendoza and of 2.6% in Cordoba, which are still very high numbers for us, given our targets, but that really speak of a very significant reduction of inflation. I think that what surprised [the population this month] was that the inflation rate in the metropolitan area of the City of Buenos Aires was not below 3%, [and those were bad news]. But I repeat that, when you distinguish the second-round effects caused by changes in those prices regulated by the government, [from the core inflation trends] […] you can better understand why [the inflation rate was so high in the City*

[136] Sturzenegger, Federico "Presentación del Informe de Política Monetaria". Speech held at the Central Bank of Argentina, May 12, 2016, recording time 01:05:21-01:06:18.
[137] Sturzenegger, Federico "Presentación del Informe de Política Monetaria". Speech held at the Central Bank of Argentina, June 18, 2016, recording time 00:56:01-00:56:30.

of Buenos Aires]. And this situation makes us very optimistic that inflation in the country has been, and still is, falling sharply. [...] But well, the reality is the reality and our commitment is to reach the targets we have set ourselves". [138]

Thus, in the view of the monetary authorities, it was only a matter of time before these downward trends began to manifest themselves in statistical data across the country. Still, in a context where it was already obvious that the target of having an annual inflation rate of 25% would not be met, the monetary authorities were forced to adjust their targets. Thus, little by little, they abandoned their first goal - bringing the annual inflation rate as close to 25% as possible -, and focused instead on a new target: achieving a monthly inflation rate of 1.5% or less during the last quarter of 2016. And, as if by magic or whim of fate, the change of target coincided with a much better period. In fact, as Table 1 illustrates, while during the first semester of 2016 the inflation targets deviated considerably from the guideline band, monthly inflation rates in the second semester were much closer to the goals established by the monetary authorities.

Figure 1



Source: own elaboration based on data from the Central Bank of Argentina

[138] Ibídem, recording time 00:56:31-00:58:07.

For example, in November and December 2016, the monthly inflation rates reached 1.8% and 1.4%, respectively. And by January 2017 this figure dropped to 1.3%. Moreover, even if during some months in the second half of 2016 (i.e. August and October), the inflation rate deviated significantly from the target, the average monthly inflation rate during that period was indeed 1.5% per month. Thus, put differently, despite the volatility shown by the monthly inflation indexes during the second half of 2016, on average, the inflation target set by the central bank for that period was met. And this was noted by Sturzenegger during the press conference on January 17, 2017:

> *"Regarding the targets set by the Central Bank [...] we talked about hitting a monthly inflation target of 1.5% per month, or less, in the last quarter of the year. And [...] [you can see in the slide that] the average monthly inflation rate in the last six months of the year was indeed 1.4%, [...] That is, [we reached our target] not only in the last quarter of the year, but actually in the last semester of the year. Moreover, those figures are equivalent to an annual inflation rate of 18.5%. In other words, [what I mean is that] during the last six months, the Argentine economy has been running […] at an annual inflation rate below 20%. So today we can confirm that in the second half of 2016 inflation in Argentina has been running at 18.5%, which is the annualized average of the second semester. So [...] you [can verify that] the Central Bank met its inflation target. [I highlight this because] I remember that at the time when we set this inflation target, the general response was skepticism, but the truth is that, luckily, we have met the target".* [139]

Confident of their success, the monetary authorities emphasized their triumph. Even when it had not been possible to meet the annual target of bringing inflation close to 25%, the work done throughout the year had finally led to positive results. Despite the fact that monetary policy worked with time lags, sooner than later high interest rates had paid off and inflation was falling. And even though there were still quite a few economists who had serious doubts regarding Argentina's monetary program and its efficacy for

[139] Sturzenegger, Federico "Presentación del Informe de Política Monetaria". Speech held at the Central Bank of Argentina, January 17, 2017, recording time 00:03:10-00:05:44.

mitigating inflation in the long-run, there were many others who began to trust. Many journalists were optimistic. And with good reason. After nearly a decade of double-digit inflation, the central bank finally seemed to be hitting the nail on the head. Yet, even if the overall climate during the presentations of the monetary policy report was more relaxed between late 2016 and early 2017, fears had not cleared up completely, and the monetary authorities still had to face some questioning. Thus, for example, during the press conference of January 17, 2017, journalist Liliana Franco, from the newspaper *Ámbito financiero*, pointed out the following:

> *"You have convinced me that you have a spectacular prognostic ability. So I am going to ask you, why is it then that, not only some private consultants but also the International Monetary Fund have doubts regarding your forecasts of two of the most important variables. One is growth […] and the other is the [forecasted] inflation-rate. And [perhaps] a third point is that there are some papers from the [International Monetary] Fund that also speak of doubts regarding the value of the exchange-rate in Argentina, especially because of the uncertainty generated by the United States and the possible appreciation of [the dollar in the upcoming months]. So, now that your prognosis ability is so good and [now that the inflation targets] have been met, I would like to know what [do you think of these issues]".*[140]

Sturzenegger, for his part, showed confidence in the results of the economic program and pointed out that he did not understand very well the reasons behind this lack of confidence that some still showed.

> *"I told you that for us [this lack of trust] is a bit paradoxical. Actually, some time ago we said [that we were going to reach] a monthly inflation rate of 1.5% in the last quarter of the year. And [we know that] central banks have the tools for keeping inflation in check, here and anywhere else in the world. Of course, disinflation processes*

[140] Sturzenegger, Federico "Presentación del Informe de Política Monetaria". Speech held at the Central Bank of Argentina, January 17, 2017, recording time 00:45:43-00:46:36.

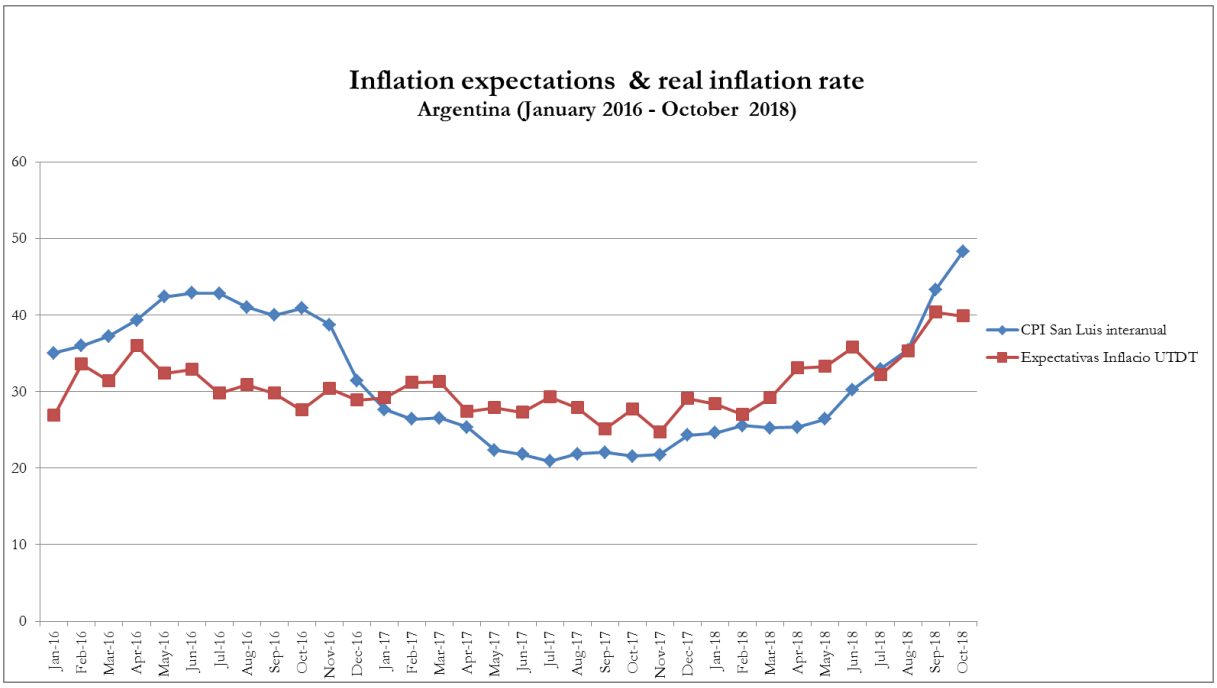
require that we [central bankers] build credibility, so that is [a] very important [factor to consider/that has to be considered]. Indeed, when we started this process in the first semester [of 2016], the credibility conditions were perhaps not the ones that were given afterwards, nor the ones that are going to happen in 2017 and later, right? And gradual processes of credibility construction are not something unique to Argentina. [...] So the only thing that we care about in the end is to say something and try to fulfil it. So this year we were very categorical, we promised something and we accomplished it. And so, people acknowledge and [draw their own conclusions], and they either believe or do not believe and depending on that they start drawing their perspectives for the next year, right? So, we promised that [we would reach an inflation rate of] 1.5% [during the last quarter of 2016]. We also promised [that the transfers to the treasury would reach a maximum amount of] 160,000 [millions of pesos]. And in both cases we fulfilled [our promises]. […] And we are going to [continue] working day and night throughout the year to continue building this credibility; and we think that, eventually, [the expectations of the market analysts] will converge [with our own]. The truth is that sometimes I want to shake someone up, but I can't do it".[141]

Thus, after months of constant work, the Argentine central bank was finally accomplishing its goals and, thus, regaining its long-lost credibility. And as the central bank start regaining its credibility, market analysts' inflation forecasts also began to gradually converge with the official targets. In fact, even if in January 2017 the inflation forecasts of private market analysts were still higher than the official inflation targets, the figures were getting closer. Moreover, temporary price movements were no longer affecting medium-term inflation forecasts. A clear proof of this situation was that, as Table 2 shows, between July 2016 and March 2017, markets analysts' inflation forecasts not only remained stable, but even showed much less volatility than the actual inflation rate itself. This, in turn, was a clear indication that 'the market' increasingly started to

[141] Sturzenegger, Federico "Presentación del Informe de Política Monetaria". Speech held at the Central Bank of Argentina, January 17, 2017, recording time 00:47:20-00:48:53.

trust in the ability of central bank to stabilize inflation along a pre-designed path. All in all, inflation targets seemed to be finally acting as a guide that was bringing the private sector's inflation expectations into line with the disinflation trajectory established by the monetary authorities. Sturzenegger, on his part, sought to make society understand how beneficial this situation was. Indeed, by 'anchoring' inflation expectations, the central bank's monetary policy was fostering a climate of greater predictability, thus making a significant contribution to the process of economic development. *"It is evident that today inflation expectations are anchored. [...] And this is how it is supposed to be in an inflation targeting scheme. That is to say, the Central Bank states 'this is my target', the economic agents believe it or don't believe it, [in other words] they are convinced or they are not convinced, and they generate their inflation expectations accordingly. [...] And it seems to me that this is already happening [in Argentina] [...] and that 'the market' is showing that it expects a very low inflation [in the second half of this year]*.[142]

Figure 2



Source: own elaboration based on data from the Central Bank of Argentina and from the Centro de Investigación en Finanzas (Universidad Torcuato di Tella).

[142] Sturzenegger, Federico "Informe al Congreso…", Speech held at the Argentine National Congress, May 18, 2016, recording time 00:20:03-00:21:47.

Finally, they were succeeding and Argentina's uncontrollable inflation was giving way. Indeed, this optimism lasted for several months during which the new monetary authorities breathed a sigh of relief. What is more, as the inflation rate dropped, the central bank also relaxed interest rates. As a matter of fact, between April and December 2016, the nominal value of the benchmark interest rate dropped from 38% to 24.7% (see Table 3). And as inflation fell, the government continued, at a steady pace, nurturing the image of an encouraging future, a future in which Argentina managed to finally stabilize its currency. And actually, this future, which was in tune with what the authorities had planned, was already happening.

> *"Looking into the future, I imagine a vibrant and active financial sector in Argentina, a deeper financial sector with much more impact than the current one. [...] A financial sector [that] will not only allow us and help us to save, but that will also provide us with financial instruments that will allow us to reduce our labor and financial risks. [In this future] the access to financing will be directly related to our tastes and to our lifestyle. The relationship with the financial sector will be richer, more complex and interactive. In this future, perhaps not so distant [...] savings will be much more abundant than they are today. [...] This will be a world where the access to finance will be easy... [...] Who can deny that we envision a promising future? [...] That is where we are going. But where are we today? Well, I would say that still a little far, but at least we are on the right track".*[143]

> *"I can assure you of several things on which we have set explicit objectives: [I can assure you] that Argentina will finally achieve low and stable inflation, that low inflation will bring greater economic growth, that low inflation will allow us to rebuild our credit market, and to create a society with more equal opportunities and lower levels of poverty. We will have a predictable macroeconomic scheme, with lower costs for capital, and where the exchange-rate will not be artificially diverted from its logical level, and will act as a buffer for economic activity. [Where the exchange-rate will be] a shock absorber, that Argentina never knew how to create. [And all of this will*

[143] Sturzenegger, Federico "Viajá al futuro" [in English: "Travel to the future"]. Speech held at the Asociación de Marketing Bancario Argentino, September 5, 2016, pp. 1-3.

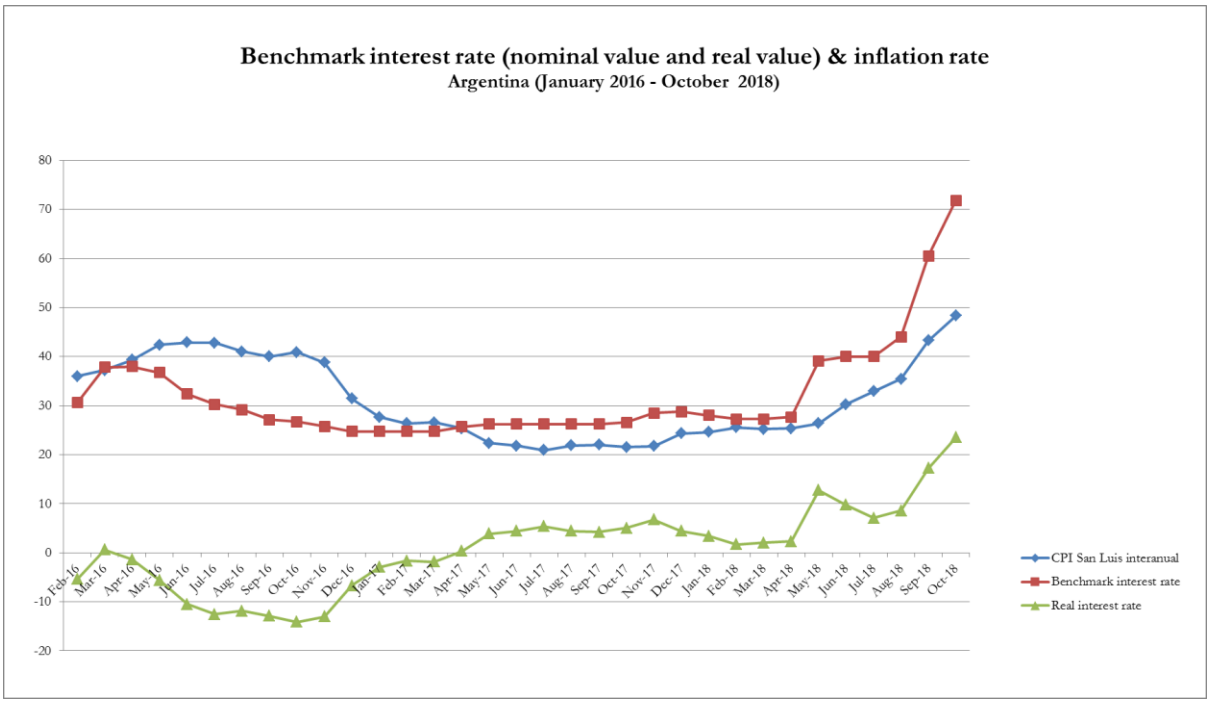
be achieved] in a context of dialogue, of search for joint solutions, of respect for the institutions that make a true Republic. Our message is based on coherence, austerity and work. We believe these are the ingredients for having a national industry which is finally able to grow and develop without restraints, looking at the world while serving a robust and growing domestic market".[144]

And even though not everyone agreed with this optimistic assessment and there were still those who pointed out that there were still many reasons to be worried, given that, in fact, the annual inflation rate in 2016 had exceeded 30%, the truth is that by early 2017 the credibility of the Argentine Central Bank was on the rise.

But, for the misfortune of the new authorities, and of society as a whole, Argentine inflation was not so easy to tame. Thus, contrary to all the auspicious forecasts, inflation soared in February 2017. Perplexed, analysts tried to find explanations for this new inflationary upsurge. While some blame wage-setting dynamics (which are typical of the first semester in Argentina), others blamed the monetary authorities for having excessively relaxed the monetary policy. Others, on the other hand, blamed sharp price increases related to the government's subsidy reduction policy. And, of course, there were those who pointed out that, actually, the monetary authorities had never really understood the causes behind inflation and that the decline of the previous months had been mere luck. But there can be no doubt that, for whatever reasons, between February and April 2017, monthly inflation rates were notably higher than the range stipulated by the central bank.

[144] Sturzenegger, Federico "Perspectivas para la economía 2017. La mirada del Banco Central" [in English: "Economic perspectives for 2017: The central bank's view"]. Speech held at the Unión Industrial Argentina, November 22, 2016, pp. 13.

Figure 3



Source: own elaboration based on data from the Central Bank of Argentina, the Instituto Nacional de Estadísticas (INDEC) and the Province of San Luis statistical department

And hand in hand with these new inflation figures, long rooted fears within society were also unleashed. In contrast to the positive image of the future that the monetary authorities had been nurturing, an image of a desirable, and reachable, monetary future in which the country finally managed to overcome its historical imbalances and recover its long-awaited monetary stability; the image of a fearsome, unstable and fragile future began to gain strength. A dreadful future, one in which Argentines seemed to be doomed to forever inhabit an unstable country, condemned to repeat the same mistakes over and over and to experience their own traumas over and over. Everything seemed like a perpetual circle. Such fears were evident, for example, in the comments of the journalist Marcelo Gatti from *Agencia de Noticias DIN*, during the press conference of July 18th, 2017. *"What we all know, appealing to the numbers that are available, is that during the first-half of the year the inflation rate was 11.8%. According to a calculation made by [the consulting firm] Elipsis, the monthly average [inflation rate] in the second half of the year has to be 0.76%. for [the annual goal] of 17% to be met. And [the truth is that] already in July, in the best of cases, the inflation rate will be equal to that of June, or even 5 tenths more than 0.76%. And [as a corollary] you just said [Federico] that the central bank expects that the inflation rate in the last quarter of the year will be a little less than 1%. So, in*

other words, one turns the numbers round any way and still does not meet the annual target of 17%. What do we have to think/believe, what [secret instruments] does the central bank have so that we don't think that the annual target of 17% is no more than an expression of desire?".[145] And although the president of the central bank tried, once again, to bring peace to the population and to calm things down, to the extent that panic and discontent grew, the inflation expectations of Argentines became ungovernable.

Indeed, in the months that followed the inflationary upsurge of early 2017, criticism was widespread, and no matter how optimistic the monetary authorities might want to look, they faced increasing difficulties in convincing the population. From practically every corner, journalists, specialists and politicians alike pointed out, again and again, with great concern, the monetary blindness of the new authorities. In most peoples' opinion, the new authorities had completely underestimated the domestic importance of certain key factors for the reproduction of inflation. These included, for example, the inflationary effects caused by distributive struggles, exchange-rate variations, and price increases related to the government's subsidy reduction policy. In fact, for many economists, Argentina's untamable inflation had little to do with the supposedly excessive monetary issuing of the past and much to do, instead, with the substantial price increases of many public services. In this sense, according to many economists, one of the major culprits of the rising inflation was the sustained rise in the costs of public services, a rise that had been fostered by Mauricio Macri's own economic cabinet. Considering the circumstances, these economists argued that the most sensible thing for the government to do was to wait until prices had found their new equilibrium before trying to put in place any kind of inflation-control policy. In such a view, even if it was painful, Argentines had to accept that, while prices were still readjusting, they would need to accept the situation as it was and to put up with an inflation rate which was higher than what was desired by society and the authorities themselves.

> *"Argentina's monetary policy was wrong from the very beginning, [partly because] it suffered from major diagnostic problems. Let's focus on the monetary policy. I mean, we know that the fiscal policy*

[145] Sturzenegger, Federico "Presentación del Informe de Política Monetaria", Speech held at the Central Bank of Argentina, July 18, 2017, intervention of the journalist Marcelo Gatti (Agencia de noticias DIN), recording time: 00:50:41-00:51:35.

proposed a gradual cut of [public] spending. [...] Now, the monetary policy thought that its [main] objective was to bring inflation down, [and thought it could] achieve this goal thanks to its institutional power, thanks to the signals that [the central bank] was sending out, signals that, for example, the central bank was committed to [a specific inflation target] [...]. And [it also thought] that it would [be enough to] use the interest rate [as an instrument]. But this was a mistake. Because [any economist knows that to stabilize the economy] first you need to have relative prices more or less in order. Relative prices, essentially the exchange-rate and the prices of public services [need to be in equilibrium], before you start with any inflation-control policy. In other words, if the exchange-rate and if the prices of most public services are lagging behind, it is useless to try to put in place an inflation-control policy, because the moment these prices jump, the inflation rate is going to jump as well [...]. So again, this transition [towards price equilibrium] can be very costly, very painful, but [it has to be done]. So this is the number one step. And [only once] [...] you have those relative prices in equilibrium, only once you have those relative prices in order, you can [...] [focus in developing a] successful inflation-control [policy]. [But to lower inflation], unfortunately you have to first go through a phase in which you establish the initial conditions, [a phase] which essentially involves putting relative prices where you more or less feel comfortable to start the inflation-control policy. [...] Because to try to lower inflation [with relative prices that are not in equilibrium] [...] is a little bread for today and a lot of hunger for tomorrow". [146]

And there were not just the local economists who were critical. At that point, even the International Monetary Fund itself failed to believe that inflation targeting was the solution to Argentina's old inflation problems. As journalist Roberto Pico from *Agencia de noticias DIN* said during the press conference of April 18, 2017, at this point, the government's economic plan seemed to have no defenders outside Mauricio Macri's inner circle.

[146] Interview to economist Dr. Daniel Heymann (CONICET), May 21, 2018.

"Today even the IMF rectified Argentina's inflation forecasts and put it at [a higher figure than the one projected locally]. [...] Those economists who used to be closer to the view of the government have all been very harsh and very critical. In the last few weeks not only the coherence of the economic plan has been severely criticized, but also the goals of the central bank. Indeed, there are many who say that the economic plan is not going anywhere... [In short], many very hard things have been said [about the economic program]. It's practically only you [at the central bank] and the government defending your policy. My question, then, is how do you politically stand in a context where you don't have a single defender outside the government?". [147]

But, once again, the monetary authorities did not give in. On the contrary, with stubborn firmness, they insisted that their monetary policy was the right one and pointed out once more that, ultimately, what mattered was the general liquidity of the economy, which, in turn, determined how far prices could collectively rise. Therefore, even in these conditions of high uncertainty, where indeed many relative prices were still changing, as long as the central bank maintained a contractionary monetary policy and a positive real interest rate, the money market would eventually reach its equilibrium and inflation in the economy would fall to the desired levels.

"The fact that some specific prices are still changing (those of fuel, public services, etc.), should not worry you because, in the end, what matters is the final price [...] of all goods. In other words, when a price rises, in a way it takes away purchasing power from the other goods. [...] Part of my task today is to coordinate expectations, [and so] I try to talk to price setters and to tell them 'look, you should know that this is the monetary policy, and that this is the [inflation] target, so that means that [...] today the amount of money [in the economy] is only 22% higher than it was a year ago. So close your eyes [and imagine] that if you set your prices higher than 22% [more of what you had them] last year, and if everyone [would do the same and] set prices more than 22% [higher than] they [had them] last year, [then] we have a problem, because the pesos [we have in the

[147] Sturzenegger, Federico "Presentación del Informe de Política Monetaria", Speech held at the Central Bank of Argentina, April 18, 2017, intervention of the journalist Roberto Pico (Agencia de noticias DIN), recording time: 01:31:14-01:32:08.

economy] are not enough [to pay for those goods]. So, when a specific sector raises its prices, it actually takes away purchasing power from the rest. So, perhaps in the very short term, as we had seen in May or April, [this equilibrating mechanism] does not work properly, but [in the long-run this mechanism works, and that is the reason why], ultimately, the general level of prices does not depend so much on a specific price, but on the general liquidity of the economy".[148]

The authorities' optimism and certainty in their ability to bring inflation within the pre-established range seemed unwavering. Where critics found signs of weakness, and highlighted the resilience of price increases; the members of the monetary policy committee insisted tirelessly on the efficacy of the new policy. Even if reality showed daily that by mid-2017 there were still many prices rising above the range set by the monetary authority, Sturzenegger's team emphasized over and over that the upsurge of inflation of April had simply been an expected and isolated event due to occasional cost increases. Still, journalists insisted with their untiring questions and asked the monetary authorities how plausible it actually was to reach the goal of having an annual inflation rate of between 12% and 17%. Sturzenegger, for his part, replied firmly and without losing cool: *"I will answer you simply by asking you and the people that are watching us, to please remember what happened last year. Last year [...] the inflation rate was three times higher in the first semester than in the second semester. And [I repeat, that for this year] we knew that February, March and April were going to be delicate [months] because there were a whole set of price readjustments [...] that were concentrated in these months. So you don't have to extrapolate what's going on in these months [to the rest of the year]. [...] All the countries [that have put in place inflation targeting] had succeeded in [lowering inflation]. So why wouldn't Argentina? It's just a matter of being coherent, being consistent, doing what needs to be done, and I think we're on that path".* [149]

But at this point, economic analysts' widespread belief was that the new monetary policy would not help to tame inflation. Thus, while the central bank authorities insisted on maintaining high nominal interest rates, thus assuring having a slightly positive real interest rate throughout the whole disinflation period, discontent was spreading more and

[148] Sturzenegger, Federico "Informe al Congreso…", Speech held at the Argentine National Congress, May 18, 2016, recording time 01:13:23-01:14:51.
[149] Sturzenegger, Federico "Presentación del Informe de Política Monetaria", Speech held at the Central Bank of Argentina, April 18, 2017, recording time: 01:06:54-01:08:13.

more. Even within the private sector, the general perception was that not only was the policy of high interest rates not helping to lower inflation, but worse still, it was causing a severe recession that only deepened the stagflation of the economy. And so, noted journalist Marcelo Pelae from *Canal 13* and *Todo Noticias* during the press conference of April 18, 2017, when he asked Sturzenegger if he *"could explain how can the Argentine productive system grow when today the central bank offers investors financial yields that are above the projected inflation rate? For example, as of today, between the forecasted inflation rate for this year and the policy rate there is a difference of 8%".*[150]

And so, in addition to the disagreements about which were the main drivers of the Argentine inflation, a second disagreement emerged about which were the most effective tools to tame inflation. In fact, even if the monetary authorities insisted on following to the letter the most orthodox version possible of the international monetary recipe book, which indicates that the fundamental monetary policy tool within inflation targeting is the benchmark interest rate; for many local economists such a policy was not adequate for a country like Argentina. Indeed, since the Argentine economy had a very small financial market (about 15% of credits per of GDP), it was natural to assume that, in such a small credit market, the impact of rising interest rates was, to say the least, very limited. Therefore, there were many specialists who thought that a policy based on raising the interest-rate would not help to tame inflation, nor would it increase the overall level of deposits in the domestic financial system.

"To use the interest rate [as a monetary policy tool], especially in countries with a very low level of financialization and with such a small financial system [does not make sense]. The interest-rate is useless when it comes to stimulating credit [in an economy like Argentina's]. It is literally useless. And to think that because you have a low interest rate, you're going to raise the level of credit, is to be an idiot. In this country [to think that way] is to be an idiot. What you have to do [if you want to increase the level of credit] is to give multiple lines of credit. But these are both very different types of policies, or policies that] act in very different ways. One seeks [to manipulate] a price, that is because the interest-rate is a price of the economy; while the other [policy seeks to manipulate]

[150] Sturzenegger, Federico "Presentación del Informe de Política Monetaria", Speech held at the Central Bank of Argentina, April 18, 2017, intervention of the journalist Marcelo Pelae (Canal 13 y Todo Noticias), recording time: 00:59:58-01:00:33.

quantities, so you grant loans, and more loans, and more loans. [...] Today [the situation in Argentina] is unsustainable because there is no other instrument [of monetary policy]. [...] That's why I'm against using only one thing, [against using a single monetary policy tool]. And what I'm saying is precisely that you have to have more instruments and use them well. Is the interest rate a possible useful instrument? Yes, indeed. But [the problem is that] today this is the only instrument [of the central bank's monetary policy toolkit], and with that one single instrument you want to do eight hundred fifty thousand things. You want to stimulate the real economy, you want to slow down the real economy, you want to calm down the dollar, you want to calm down inflation, that is, you have to do eighty thousand things, and three quarters of them are incompatible. So what I'm telling you is 'use more things, use more instruments'. [...] For example, you can have different interest rates. [...] You can use different rates, different lines of credit. [...] [But no matter what you do] please use more things, not just one. That's my view... You don't have to be satisfied with just one tool, you don't have to have such a narrow vision". [151]

Indeed, the debate about the negative impact of the new monetary policy and the costs of keeping nominal interest rates so high was so virulent that in April 2017 the central bank decided to add a special section to its monetary policy report in which it made express mention of the benefits of lowering inflation. Moreover, during the presentation of that report, Sturzenegger did not hide his surprise regarding the wide social debate about the need to tame inflation. In his view, the argentine society did not seem to be convinced that it was necessary to lower inflation, and this was a fact that he found extremely puzzling. *"In today's presentation [...] we are going to stress again the benefits of lowering inflation. Obviously, this is a debate that is taking place in Argentina. [And to be honest, I confess that we] didn't really think that we were going to have to come back to this debate again. Actually, we thought that in Argentina the benefits of lowering inflation were going to be very well understood and not questioned. But the truth is that we feel that in many places people highlight the costs of lowering inflation, and so these costs are often discussed more than the benefits of lowering inflation. So we think that it is important to come back to this topic again in more depth".* [152]

[151] Interview to economist Dr. Pablo Bortz (CONICET), May 28, 2018.
[152] Sturzenegger, Federico "Presentación del Informe de Política Monetaria", discurso pronunciado en el auditorio del Banco Central de la República Argentina el 18 de abril de 2017, tiempo de grabación 00:01:17-01:02:01.

But no matter how many attempts the monetary authorities made to try to regain society's trust and to convince economic analysts that inflation was under control, questions did not stop. To make matters worse, during the second half of 2017, and even when monthly inflation rates again dropped slightly, the monthly average inflation rate remained stubbornly higher than the inflation target. By October, accumulated inflation for the year reached 17.9%, making clear that, once again, the central bank would not meet its annual target. Once again, the journalists did not stay silent anything and became the privileged spokespersons of the fears of the Argentines before the monetary authorities. *"I also want to insist on the idea of [...] expectations and trust. Last year's inflation rate ended at around 36% and even though that number is extraordinarily high, this year's inflation rate is not going to be the half of that figure. Actually, you [Federico] just mentioned that. So, why then should 'the market' trust and [why then] should we all trust, that next year's inflation rate is going to be the half of this year's inflation rate […]. Put differently, if the inflation rate this year is not going to be even the half of 36%, how are you going to do that next year's inflation is even less than the half of 23%*?[153] And to the extent that during 2017 the central bank could not show a substantial improvement on its control of inflation, its policy was lost all credibility.

Fell into discredit, the monetary authorities persevered, however, in their strategy of maintaining high interest rates. Stubbornly, they insisted that, even if the disinflation process was occurring at a slower pace than everyone wanted, the most important thing was that inflation was falling and that private sector's inflation forecasts showed that inflation would keep its downward trajectory. Moreover, they claimed their only mistake had been to be too optimistic, too ambitious.

> *"[It is important not to lose sight of the fact that] there is a very [...] persistent consensus [in 'the market'] [...] that the disinflation process is going to deepen in the upcoming months and the upcoming years. Of course, we still have a credibility gap, of course there is still that gap because our goal for next year, from the beginning to the end, is [to achieve an inflation rate of] 10% and the market is expecting an inflation rate of 15.8%; and our goal for 2019 is [to*

[153] Sturzenegger, Federico "Presentación del Informe de Política Monetaria", discurso pronunciado en el auditorio del Banco Central de la República Argentina el 18 de octubre de 2017, intervención de la periodista Cecilia Bouflet (Diario Clarín y Todo Noticias), tiempo de grabación: 01:01:56-01:02:41

> *achieve an inflation rate of] 5% and the market is expecting 11%. So that also means that we have to work harder and better to achieve that convergence of expectations in the upcoming months and definitely in the coming years. But what is important is that the disinflation process is clearly internalized in the expectations of 'the market'.*[154]

But, at this point in time, virtually no one supported them. And there were good reasons for this lack of support. Indeed, seen from today's perspective, the truth is that the results achieved during these two and a half years of inflation targeting left much to be desired. Not only monthly inflation rates deviated significantly from the targets, but the annual inflation targets were never actually met. During 2016, for example, the annual inflation rate comfortably exceeded 30%. Depending on the index we use to measure inflation, between January and December 2016 inflation was between 31.4% and 35%, that is, at least 6 points higher than the annual target of 25%. Additionally, during 2017, according to the figures published by INDEC, the accumulated inflation rate reached 25%, that is 8 points higher than the annual target of 17% and 13 points higher than the annual target of 12%. Last but not least, in 2018, following the devastating currency crisis of April-May, 2018, the inflation rate reached a dramatic 49.3%.

Finally, in a last attempt to regain their lost credibility, the monetary authorities did what they had sworn never to do: change their inflation target. Thus, on December 28, 2017, the chief of cabinet Marcos Peña, the minister of the treasury Nicolás Dujovne and the minister of finances Luis Caputo sat down together with Federico Sturzenegger and held a joint press conference in which they announced a 'recalibration' of the inflation targets for 2018 and 2019. In the new scheme, the goal of achieving an annual inflation target of between 8% and 12% (i.e. an annual average of 10%) was replaced by a new goal: to reach an inflation of 15% in 2018. In theory, the change was aimed at bringing the inflation targets closer to the real inflation rates, so that monetary policy would be more credible. Put differently, according to Sturzenegger's own statements, given that the authorities were aware of the flaws in their inflation forecasts, and given that inflation was stubbornly higher than the old targets, the central bank wanted to bring the inflation

[154] Sturzenegger, Federico "Presentación del Informe de Política Monetaria", discurso pronunciado en el auditorio del Banco Central de la República Argentina el 18 de octubre de 2017, tiempo de grabación: 00:22:49-00:23:45

targets closer to the real inflation rates, thus making them more credible. But, to the authorities' surprise, the attempt to make monetary policy more credible was not well received. Indeed, the reality was that what 'the market' felt was that the central bank had lost its independence. As a result, right after the change of targets, inflation expectations deteriorated more than they had done in the previous 15 months as a whole. What happened? The credibility of the central bank had collapsed. The situation only became worse in the months that followed. Indeed, during the first months of 2018, interest rate movements done by the Federal Reserve found a weak Argentina, an Argentina with a weakened central bank and with an extremely fragile currency. The result of this combination was a severe currency crisis, which ended up burying the inflation targeting regime. On June 14, 2018, weeks after the crisis, Sturzenegger submitted his resignation as president of the Central Bank of Argentina giving way to a new chapter in the history of national monetary policies, which would embrace the dollar once again.

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In December 2015, Mauricio Macri became president of Argentina and appointed Federico Sturzenegger as president of the central bank. *"When the president called me for this task, he told me: 'we must regain people's vote of confidence'; and he stated that my primary task would be 'to give back the Argentines their currency'"*, the new governor confessed during his first speech at the central bank. The new governor had a great challenge ahead of him. In a country that, since the foundation of its central bank in 1935, had suffered all kinds of monetary disorders without ever succeeding to stabilize its currency for long-sustained periods, he wanted to 'give back' the Argentines their national currency. The task seemed titanic. However, during his two and a half years in office, Sturzenegger did not seem intimidated. Indeed, on December 14, 2015, just four days after taking office, standing in front of an audience full of journalists, financial experts and employees of the central bank, he presented the main guidelines and objectives the central bank would have during his management. He began by pointing out what he would highlight many times in all his conferences, that the main goal of the central bank's new administration was to convert the Argentine peso into a reliable currency, into a currency capable of properly fulfilling its primary functions, among them the longed-for function as a reserve of value. His administration, his central bank, wanted to give Argentines something that their history had denied them until today: a currency

in which they could save. However, together with his promises, the new governor also warned that the value of the peso should be measured with a new yardstick. Unlike in the past, Argentines would have to stop measuring the value of their national currency in terms of comparing its price with that of the US dollar. In other words, it was necessary for Argentines to learn to use a different reference point with which to assess the value of their domestic economy, namely, the inflation targets established by the central bank.

But if the monetary authorities wanted to make the expectations of Argentines stop focusing on the dollar and its price on the market, they needed to be able to establish another mechanism that could guide the expectations of economic agents. To this end, the new authorities of the Central Bank of Argentina embraced inflation targeting. Just like in other countries, the new policy required that the central bank announced specific inflation targets and commit to them. These targets, in turn, would provide a focal point which would help the central bank to coordinate economic agents' expectations and to bring them into line with the parameters already prestablished by the monetary authorities. Thus, the moment had come for the Central Bank of Argentina to create a different monetary policy, a policy which would not rely on the 'shortcut' of using the exchange-rate between the Argentinean peso and the US dollar as a monetary-anchor to coordinate expectations during a phase of transition towards lower inflation levels. From now onwards Argentineans would have to stop using the dollar as a reference point and learn to focus their attention on the inflation targets established by the central bank. In the meantime, the price of the dollar should be left for the market to regulate.

For more than two years, the central bank tried to create trust in the currency on these completely new grounds. However, as we have seen, this trust proved unruly. To the extent that the government never managed to fully convince Argentines of the efficacy of its anti-inflation policy, it also failed to establish a new coordination tool that could effectively replace the U.S. currency from that role. In fact, one of the most dramatic consequences of the lack of credibility on the new monetary policy was that Argentines went back to their old habits. Put differently, given the inability of the central bank to formulate credible inflation targets that could effectively become in an anchor for inflation expectations; the unhealthy obsession of Argentines with the dollar, cultivated for decades, remained intact. Thus, if on the one hand, the successful implementation of the new monetary policy was limited by the inability of the central bank to formulate

credible inflation targets, on the other, there were the Argentines' old monetary routines of using the dollar as a reference point with which to assess the performance of their national currency, which ended up destroying all efforts to establish a different monetary policy framework.

Despite the efforts of the new monetary authorities to stress that, within the new monetary policy framework, the price of the dollar was no longer a policy goal, the questions about the present and future value of the US currency never ceased. Indeed, at every presentation of Sturzenegger, at every press conference, journalists, academics and financial experts alike kept relentlessly asking what was the expected value of the dollar for the coming months; or whether it was true that, as some economists claimed, the exchange-rate was lagging behind, thus increasing the chances of a currency crisis; or whether the central bank's reserves were sufficient to face one such crisis, and so on. And even though the monetary authorities replied over and over, with untiring firmness, that there was no expected value for the dollar, that Argentina was in a floating exchange-rate regime and that, therefore, there was no need for having an extraordinarily high amount of reserves, their answers sounded extremely insufficient. And the worst was yet to come.

7. Conclusions

How is the value of a currency socially constructed? Why do we trust in money? What is it about money that spooks people? In the following pages, I will review some of the most relevant events in Argentina's monetary history and provide an overall interpretation. I will argue that the Argentine monetary history illuminates three processes.

The first conclusion drawn from the analysis of the Argentine monetary history is that the loss of trust in a currency is a process that has a passive and active dimension. Argentina's monetary history clearly shows that monetary debates are not enough to break trust in money. On the contrary, for trust in money to fall apart, monetary routines have to be distorted. The state also plays a crucial role in maintaining trust in money. The state's leading role in fostering or undermining trust in money is dramatically evident in Argentina's history. Argentines lost credibility on the state's ability to keep the value of money. Thus, they also lost trust in the value of their currency. For seventy years, the Argentine state repeatedly proved its inability to stabilize the national currency. It implemented seventeen anti-inflation plans; only one of them succeeded. Revealingly, the plan that succeeded was the one where the state quitted the task of maintaining the value of money.

The second conclusion drawn from this study is that monetary crises break trust through a learning process engraved in people's habitus. Crises reveal money's institutional reality; thus, they cause people to stop believing in the fiction that money is a valuable commodity capable of storing value. Crises reveal the true nature of capitalist credit money. They expose that capitalist credit money is a hierarchical institution whose value is conventional and contingent. They also show that the stability of money's value depends on the state's capacity to guarantee it. Because crises reveal the institutional reality of money, they severely endangered trust in money.

Finally, the study of Argentina's monetary history shows how monetary periphery problems have intensified since 1944. In this regard, the study puts monetary instability into perspective and shows that global economic dynamics foster such instability. After 1944, the hierarchical nature of the international monetary system intensified. As the importance of the dollar grew globally, countries with weak currencies started to suffer

increasing pressures. In a world where currencies are organized hierarchically, the rise of dollarization (both worldwide and in Argentina) intensified local monetary problems. The increasing dollarization made more evident the problems or the Argentine currency and significantly constrained Argentina's political capacity to stabilize its currency. It also diminished the political capacity of the monetary authorities to decide its monetary policy framework freely. In the contemporary world, monetary policy options for countries like Argentina are minimal. The failure of inflation targeting in Argentina is proof of the limitations the country faces for being at the bottom of the monetary ladder.

The passive and the active dimensions of monetary trust

In 1881, Argentina issued its first national currency: the Peso Moneda Nacional. The Argentine state had to guarantee money's conversion into gold to impose the circulation and use of its currency on the national level. It was the era of the gold standard. At that time, the prevailing idea was that money was a commodity whose value was a consequence of it being made of (or backed by) gold. Argentina adhered to the gold standard until 1931. However, during that time, the lack of genuine gold inflows frequently resulted in currency devaluations and long periods of inconvertibility. In 1930, the Great Depression caused the breakdown of the gold standard. The system of fixed exchange rates between currencies that were all convertible to gold broke down. Most countries suspended gold convertibility. In 1931 Argentina imposed exchange controls. Internationally, there were discussions on how to reform the global monetary system. Since there was not enough gold to sustain a rapidly expanding world trade, countries started to allow governments to supplement their gold reserves with foreign currency. As money's value was no longer tied to gold, the concept of money as a commodity with intrinsic value was questioned.

The worldwide discussions about money's value also reached Argentina. In 1931, money became a salient political issue. Since then, the media and the various networks of economic experts have been questioning monetary imaginaries constantly. In doing so, they have deepened the Argentine society's concerns about the long-lasting value of their national currency. However, despite public contestation, until 1946, Argentines trusted in their national currency. By the beginning of the 1940s, the country had managed to establish its central bank, implement a monetary policy capable of fostering economic

growth, and ensure stability conditions to sustain money's value. One of the most persuasive evidence of trust in the peso was a financial system in which long-term savings options in pesos prevailed.

However, in 1946 the situation changed abruptly. By that time, two fundamental changes took place in Argentina: the rise in inflation and the disappearance of savings options from the national financial system. Large sectors of society started to experience the loss of purchasing power of their currency. The loss of money's value became part of everyday life. Monetary routines were disrupted. Thus, instead of having successful experiences using money, people started to experience problems. One such problem was that they had to find ways to preserve their wealth. Because saving options in pesos disappeared, the pesos deposited in the financial system flowed to other areas of the real economy, especially durable goods (such as cars and appliances) and, to a lesser extent, real estate. By 1958 Argentines started to save in cash dollars, which has remained a very popular practice ever since.

Thus, the analysis of the Argentine monetary history shows that trust in money started to fall apart in 1946, not before. Although monetary debates were already salient, they were not enough to break the trust in the peso. On the contrary, what triggered the dramatic loss of trust in the peso was the feeling of concrete material loss that appeared with the rise of inflation. Trust in money started to disappear when passive trust in money was broken when monetary routines and habits were distorted. Since 1975, the loss of trust became more dramatic. On the one hand, what caused increasing distrust in the peso was that inflation increased even further. In 1973, the inflation rate in the country reached 30%. In 1975, it rose to 300%. In 1986 Argentina experienced hyperinflation for the first time. Without a doubt, extreme inflation made the everyday experience of money's loss of value increasingly dramatic.

However, a second factor contributed to deepening people's distrust in the peso's value: the inability of the state to stabilize the value of the currency. Since 1975, active public trust in the peso (credibility) started to fall apart. The everyday experience of money's loss of value was complemented by the national political and economic drama of a state that could not control its economy or its currency. In fact, between 1952 and 1991, the Argentine state put in place seventeen stabilization programs. Except for the

convertibility plan, none of the plans succeeded in controlling inflation. Revealingly, the plan that succeeded was the one in which the state quitted the task of maintaining the value of money.

Institutional, political, and economic instability also contributed to the national drama and increased distrust in money. Since 1975 Argentina's economic policy experienced harsh turns. Several times, the country went from total openness to complete regulation. The fights between monetarist and structuralist economists were also responsible for the drastic changes in the anti-inflation policies. The political fracture in national society and the different political projects of the ruling elites also contributed to fostering chaos. After 1975, institutional instability became dramatic. Since 'Isabel' Peron took office, in 1974, to the end of the convertibility regime in 2001, all the transitions from one government to the next were dramatic. In the last months of 'Isabel's' government, Argentina had five ministers of finance. In the last two years of the military government, it had three presidents and four finance ministers. With Alfonsín, the country had four ministers of finance again. In December 2001, there were five presidents in ten days during the outburst of the convertibility crisis. Logically, institutional instability also fostered distrust in the state and its ability to stabilize the currency.

A critical remark is that I have argued, trust in a country's monetary and financial system is not only based on the absence of crises. Since the design of capitalist economies is inherently unstable (Minsky 1982) crises are often unavoidable. However, as scenarios such as the 2008 crisis shows, in times of crisis, policy responses to crises and the successful management of expectations are key factors. In the case of Argentina, the effects of policy decisions in undermining trust are evident. In fact, before the 1940s, economic authorities were careful enough to (and certainly had the policy space to) resolve currency crises preserving the value of the most popular long-term savings options. For example, during the 1890s crises, the authorities maintained the value of the Cédulas Hipotecarias issued by the Banco Hipotecario Nacional. Furthermore, in doing so, they protected Argentine savers from suffering dramatic losses. True, other banks went bankrupt. Nevertheless, the authorities not only managed to safeguard the value of the country's most important savings option. They also gave a clear signal of their commitment to savers. This changed in later times. In fact, since the 1950s, on many occasions, Argentine monetary crises were solved by implementing measures that

resulted in enormous losses to savers. Either because the state was subject to too much external pressure, or because policymakers disregarded the potentially long-lasting effects of their decisions, the Argentine state systematically broke its promise of maintaining money's value and preserving savings and (financial) wealth. Not infrequently, the policies that ended up decimating Argentines' savings were an explicit goal of the economic authorities. For example, during the 'Rodrigazo', the monetary authorities clearly stated their intention to design a 'shock therapy' that would 'educate' the population. Moreover, from 1964 onwards, the Argentine state forcibly pesified and confiscated the population's savings (in dollars and pesos) more than once. The first forced conversion of dollar savings into pesos occurred for the first time in 1964, during the government of Arturo Illia. Since then, the state compulsory pesified savings on at least three more occasions, namely during the crises of 1981, 1989 and 2001. In each of these moments, Argentines experienced that their savings (often saved throughout their lives) could vanish in an eye's blink. In this context, it is hardly surprising that Argentines have stopped keeping their savings in the financial system.

All in all, I have argued that trust in money's value depends on the existence of both passive and active trust. Passive trust depends on monetary stability and successful money use. Active trust is a socio-political construct that is ultimately based on the lasting promise that money has, and will maintain its purchasing power over time. In this respect, the state, the monetary authorities, and the financial sector (i.e., the central bank, the ministry of finance, and private banks) play a crucial role. The Argentine case shows paradigmatically how the state's lack of ability to keep the promise of money's value results in long-standing distrust in the national currency.

Crises and the nature of money

At the beginning of this study, I pointed out that trust in money is grounded in erroneous monetary beliefs. I stated that, in contemporary capitalist economies, there is a widespread belief that money is a commodity whose value is derived from its material characteristics. The dominant view of money is that it is an object with intrinsic value; it is long-lasting wealth. In this view, money's value is seen as a characteristic of money, which stems from money's material constituency. However, this image of money is an inaccurate version of money's true nature. It is a false image of money and of the reasons

why money is capable of storing value. This image of money's value rests on three fictions. The first fiction is the belief that there is 'something' behind money, a substance that sustains its value. The second is the belief that the value of money is stable and enduring. The third fiction of money is that money is homogeneous, is all-purpose money. It is the belief that all money is legal tender, standard, and uniform. However, the truth is that instead of being a material source of lasting wealth, contemporary money is an immaterial system of financial claims whose value is a collective and contingent convention that can, therefore, change abruptly. It follows then that there is a fundamental mismatch between what we collectively believe money to be and its true nature.

In this dissertation, I argued that this mismatch becomes evident in monetary crises. The realization that money is not what we believe it to be is the reason for losing trust in money's value. I argued that crises show that money's value is not a property derived from its material characteristics. They also show that money is a hierarchical institution. In the thesis, I tried to show how, contrary to the widespread idea that money was a commodity capable of storing value, since 1946, Argentines have been confronted with the institutional reality of money. Through the experience of inflation, Argentines realized that money could lose its purchasing power. Hyperinflation made this realization even more dramatic. The experience that money could be worth no more than paper started to unveil that money's value was an arbitrary number. Money only had value as long as the state could institutionally support this value. As stated initially, this was not a conscious learning process but a pragmatic process of realization engraved in people's habitus. Currency devaluations also contributed to unveil money's value conventional and contingent nature. Repeatedly, Argentines observed money's value change sharply within a few days. With each devaluation, the perception of money as something immaterial, a number that changed without any logic, consolidated. Confiscations of savings and forced pesifications also contribute to breaking down the idea of money as a valuable material asset. Argentines experienced repeatedly the complete dematerialization of their bank deposits. The popular interpretation was that the savings that had been 'materially' in the bank had disappeared. However, what pacifications revealed is that there was no material asset backing money's value. Money's value was no more than a contingent convention that had no value behind its state guarantee. In short, through crises, Argentines learned that the value of money, its purchasing power, was nothing more than a socially shared and institutionally supported convention.

Finally, due to repeated monetary crises, Argentines also learned about the hierarchies of money. During crisis, the hierarchical nature of money (both at the national and international levels) becomes evident. Thus, if the differences between the peso and the dollar were already dramatic in standard times, during crises, they became more acute. Crises in Argentina also revealed the differences between outside and inside money. Because inside and outside money stopped trading at par, people realized that having money inside the financial system was not the same as having it outside. One example of events that made the distinction between inside and outside money clear is compulsory pesification. On several occasions, dollars within the financial system were transformed into pesos by the state. Meanwhile, dollars held outside the national financial system (often in cash) kept their purchasing power. Logically, not by chance, cash dollars became the preferred reserve asset of Argentines. It is essential to highlight that the preference for cash dollars is entirely logical. Cash dollars are the safest asset in the whole contemporary monetary system. This is because the dollar is the currency at the top of the currency hierarchy, and because cash dollars are the liability of the Federal Reserve. That means they have zero default risk. So, cash dollars top the international monetary hierarchy. This preference shows that the choices Argentines make on how to keep their savings 'safe' reflect real differences between different types of money in the contemporary monetary world.

Seventy years of monetary misfortunes taught Argentines that the value of a currency is a contingent convention but forced them to remember it permanently. After so many reiterations that showed that money is a convention, a convention that must be endorsed and guaranteed by the state, but a convention, in the end, Argentinians finally understood that money was an accounting instrument that had no intrinsic value outside its state guarantee. Moreover, through this learning process, trust in the Argentine currency was broken to a point that was difficult to solve.

Dollarization and monetary policy constraints

Argentina had balance-of-payments issues since 1880. However, from 1949 onwards, Argentina's monetary problems increased. From that moment on, currency crises became more severe and had an increasingly negative effect on the population and their trust in the value of money. Since 1949, the harsh movements in the peso's external value (the

exchange rate) began to undermine, more and more, trust in the peso. However, what is the reasons for such a change in the effects caused by currency devaluations? Why the currency crisis that occurred before 1949 did not affect trust in money? There are probably several reasons to consider.

The first reason is that, during the gold standard era, gold inconvertibility was far from being a local singularity. Also, until 1935, the backing of Argentina's currency in gold was close to 100%. Although there were many periods when the currency was inconvertible, until 1935, Argentina's gold reserves far exceeded the country's needs. A second reason that can explain why currency crises started to affect trust in money more deeply after 1949 is that currency shocks became sharper and more frequent. Since 1955, Argentina has been suffering mega-devaluations. The intensification of Argentina's balance of payments crises is related to the country's increasing needs for dollars and its lack of ability to reestablish its trade balance. In fact, since 1949, Argentina's external restriction (lack of dollars) has increased constantly. Several factors have contributed to the increasing lack of dollars. Industrialization increased the need for imports and, thus, for dollars. Market deregulation and increasing capital flight fostered financial dollarization and encouraged internal dollar demand. The internationalization of the economy resulted in more companies that wanted to send remittances abroad and also demanded dollars. All these factors fostered Argentina's structural dollar dependence and made the national economy more vulnerable to suffer balance of payments crises.

A third (and crucial) reason that explains why currency crises have more dramatic effects after 1949, is that the international monetary system's hierarchy increased, and the dollar became a measure for money's value. After 1944, the dollar became a socially widespread instrument to measure and quantify the losses caused by each monetary crisis. Before the Bretton Woods agreements, the US dollar was not yet in Argentina (nor in the world), a measure of money's value, as it would be later on. After the signing of the Bretton Woods agreements, trust in the value of capitalist credit currencies became inextricably linked to the dollar. In Argentina, it was precisely in 1957 (the year in which Argentina joined the Bretton Woods system) that the dollar began to grow in importance, both symbolically and materially. On the one hand, in a scenario of recurring crises, the dollar began to colonize Argentines' minds. It became a reference that made it possible to navigate different transactional spaces, an instrument to preserve some order in a terribly confusing

and dramatically changing economic universe. The dollar emerged as a socially generalized way of measuring and quantifying the losses caused by each monetary crisis.

Moreover, from 1957 onwards, the material reality began to link, more and more closely, the Argentine's savings to the US currency. Naturally, growing dollarization increased the effects of currency devaluations. With savings that, from 1957 onwards, began to be increasingly dollarized, the effects of devaluations became more acute. In a world where savings could be dollarized, the material losses that hit those who kept their savings in pesos after each devaluation were increasingly evident. For a population that could compare the effects of devaluations on their savings according to the currency in which they saved them, the experience of material loss after a devaluation became even more dramatic than before. Devaluations were no longer merely alarming news. They now hit people right in their pockets. With each devaluation, the real wage in the fixed-income sectors diminished even more. After 1975, the increasing inflation caused dollarization to increase even further. Logically, the intensification of dollarization amplified the psychological effects of each devaluation.

In the contemporary world, the pressures imposed by global dollarization have not diminished. On the contrary, they have increased. Today the expectations about the value of the currency in Argentina are dollarized. Over the past 40 years, the central bank has encouraged the use of the dollar as a coordinator of expectations. The limitations of the Argentine monetary dynamic are evident. In the contemporary world, where rigid exchange rate regimes are no longer sustainable (a reality demonstrated after the exchange rate crises of 1997), pegging the currency to the dollar is not a viable solution anymore. However, in a country with dollarized expectations, it is not easy to impose another monetary policy. When Sturzenegger tried to impose inflation targeting, he found it difficult to change how Argentines measure the value of their currency. With pegs no longer an option and inflation targets that do not manage to coordinate expectations, Argentina seems to have run out of options.

Appendix I: Methodology and analysis

This research's empirical analysis is based on a content analysis of academic articles, written sources, and qualitative interviews.

Academic sources are the base of the two historical chapters. These sources are cited following the traditional criteria. Fragments of original sources are included in the chapters in italics. In most cases, these fragments are taken from academic sources. Generally, the source is indicated in a footnote. Occasionally I use quotes from laws, decrees, and other legal sources. In all cases, the original source is indicated in a footnote.

The chapter on Argentina's implementation of an inflation-targeting regime between 2015 and 2018 is based on an extensive qualitative analysis of different presentations and interactions between the monetary authorities and the general public. The list of sources analyzed includes written sources and audiovisual material. In all cases, I privileged the analysis of the video material when available. The reason for this preference is that it allowed me to incorporate the interactions between the monetary authorities and the press and to have access to the public's reactions. The list of sources is included at the end of this appendix. The sources' analysis was done through qualitative content analysis following the usual methodology of reading, coding, and analyzing content in subsequent rounds. In the case of written sources, I used the software MAXQDA to support the analysis and organize the sources.

Overall, the list of sources used for this chapter include material corresponding to different types of interactions between the monetary authorities and the general public. The list includes the inaugural speech in which Sturzenegger presented the guidelines of the new monetary policy, as well as other speeches given at specific moments in which the central bank governor wanted to explain specific decisions or changes in the monetary and exchange rate policy, for example, the presentation of the inflation targeting regime in September 2016. The list also includes (i) all the presentations of the Monetary Policy Report (given quarterly), (ii) the two central bank's reports to the Argentine Congress that took place during Sturzenegger's administration, (iii) several presentations of the governor to different communities of experts, (iv) the press conference given by Sturzenegger together with other members of the economic cabinet in December 2017,

and (v) Sturzenegger's only interview with the press (conducted by journalist Jorge Fontevecchia).

The quantitative data that supports this research (i.e., inflation series, statistics on the degree of dollarization of the economy, interest rates and other data regarding the financial system) is mostly taken from Argentine public agencies' open sources. In particular, I used the inflation series provided by the Instituo Nacional de Estadisticas y Censos (INDEC) and the series provided by two official statistical agencies: the statistical office of the province of San Luis and that of the City of Buenos Aires. I also used the inflation series provided by the National Congress (up to 2018) and by the Centro de Innovacion de los Trabajadores (CITRA). The data from the financial system (interest rates, pass rates, LEBACS, etc.) is taken from the official statistics of the Argentine central bank. Finally, the data on the composition of the asset portfolio of Argentine companies and families in 1941 is taken from the dissertation of Eduardo Corso (2015). The data presented in the appendix of that dissertation is the best available on the topic and comes from internal data provided by the central bank of Argentina to the author.

Finally, the general analysis carried out in the thesis is supported by the insights obtained through the analysis of 50 qualitative interviews I carried out in the midst of the 2018 financial crises. Although only a few interviews were used in this study, I conducted 50 qualitative field interviews which support the analysis I do in this dissertation. I interviewed different categories of actors, including: (i) savers from the middle and upper-middle classes in Argentina, (ii) employees and managers working in the financial system (bank managers, financial advisors, pension fund managers, etc.), (iii) financial journalists, and (iv) academics and specialists who participate in public debates regarding money and monetary policy in Argentina, and (v) public officials from the ministry of finance and the central bank. In this thesis, I have used fragments of interviews with specialists. The interview guide is not included because (in the case of interviews with experts) the guides were adjusted to each interviewee, so there is no general model. The interviews used in this thesis, anonymized, will be available for consultation through a server of the Max Planck Society.

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