When The High-Income Country Context Dissolves

Social Policy Preferences in Low- and Middle-Income Democracies

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Introduction

The extraction of revenue in order to protect the citizenry is the prime function and raison d'être of the state¹ according to Tilly (1985). The question of revenue extraction and provision of returns has led to great turmoil and fall and rise of entire states in earlier decades (Bergman, 2002). States only persist when they do not become too greedy and predatory towards the citizenry (see Bates, 2008) and, hence, balance pay and reward. For modern states, this revenue extraction simply means taxation through the public administration, and provision of returns follows from redistribution of these revenues and the welfare state. Moving ahead of Charles Tilly's general conceptualization of the state that emerges from warfare – alluding to a Hobbesian understanding of the state but not so much in the sense of encountering wars and enemies. The modern state protects individuals from *social risks* such as unemployment, sickness, inability to work, and loss of salary in old age. Ideally, the welfare state cushions shocks from adverse life events by providing benefits and insurance and it also protects individuals from harm following external hazards such as economic downturn and crisis.

Welfare states in high-income democracies have been the objective of intensive academic research that explains its development, expansion, and retrenchment (see Esping-Andersen, 1990). Mobilization of class interests (Huber and Stephens, 2001; Korpi and Palme, 2003) has been identified as pivotal for welfare state development, what has

¹The state is of course not a unitary actor but consists of political parties and other powerful actors with particular interests. The notion of the state is used here as simplification for the general argumentation.

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come to be known as power resource theory. The 'Varieties of Capitalism' (VoC) discourse brought in a sector based explanation for the welfare state (see Hall and Soskice, 2001; Iversen and Soskice, 2001) and the importance of strategic alliances between social groups (see Mares, 2003; Iversen and Soskice, 2006). Economic risk for individual households following from globalization and trade openness has driven the debate for some time (see Katzenstein, 1985; Rodrik, 1998) and was further nourished by the academic discourse on new social risks regarding heavily changing labor markets (e. g. Häusermann, 2006; Palier and Thelen, 2010; Emmenegger et al., 2012*b*). The insider-outsider debate, which takes into account differences in employment protection within the labor market (see Lindbeck and Snower, 1986; Saint-Paul, 1996; Rueda, 2005, 2006), is just reaching a new momentum under the discourse of 'dualization' (see Emmenegger et al., 2012*a*). However, the bulk of attention prevailed on welfare states of advanced industrial nations, approaching welfare state development from both micro and macro perspectives. Only recently have researchers taken a step back to evoke the question *why* individuals actually turn towards the state for risk protection in the first place.

I have started the discussion with the image of the early nation state that emerges from warfare and finds its very legitimation in the extraction of revenue and protection of the citizenry in return. Of course, states have mostly moved ahead of this very simplified notion. However, only a small number of states have reached a level of economic and democratic development that we label advanced industrial nations and where we find generous welfare systems. In such a context, the question of why individuals turn towards the state in times of need might not appear as so very striking, as governments have proven to cope well with social risks, just to name the high-performers of the Scandinavian countries such as Sweden or Norway. Nonetheless, rigorous conflicts between winners and losers from social policies are also taking place in these environments. And we do not have to move too far on the geographical map to encounter a different scenario. Turning towards Southern European democracies that are currently haunted by the repercussions of the financial crisis, regarding the overburdened Greek bureaucracy that struggles to efficiently collect taxes for instance, it becomes much less novel to ask why individuals actually turn towards the state for risk protection when the return for paid contributions is uncertain.

Social policy needs to be understood as an iterated public goods game with a large number of participating actors (Rothstein et al., 2011; Rothstein, 2011). Individuals make contributions by means of taxation to the state as responsible entity for resource distribution, expecting a return for paid contributions – not necessarily immediately, but at some point in time. The approach conceptualizes actors as rational, capable of making strategic choices regarding the maximization of utility. The equilibrium in which the public goods game comes to a halt depends on the number of shoulders on which the burden, to sustain the welfare state, rests and also on the scope of its reach. The more exclusive and linked to contributions in the form of a defined-benefit pension system for instance, the more likely it is that the system also reinforces persistent social inequalities and freezes the social class structure. Or, as Mares and Carnes frame it, a universalistic welfare state – as alternative to an exclusionary welfare state – also presents a "socialization of risks" (2009, 108), distributing the risk on many shoulders. Collective action problems easily arise by the mere number of participants (Olson, 1971) but mostly because of the difficulty to oversee costs and gains in the complex web of policies and the uncertainty of $compliance^2$. For the public goods game to function without negative externalities all participants need to cooperate in the form of tax compliance and adherence to the rules of the game. But it is not only the question whether all lawfully obliged citizens contribute to the public goods game, as one could call into question, but it might also not be self-evident that the *state* complies, delivering social services and insurance in times of need.

To avoid negative externalities such as moral hazard and free-riding on public welfare goods actors need to have faith that everyone complies – taxpayers and the state. The time dimension is key here, because welfare services in the form of insurance are not necessarily needed immediately after contributions are made (cf. Rothstein et al., 2011). What individuals thus need is confidence in the state. Rothstein (2011) therefore refers to the public goods game as a trust game, going to the very heart of the argument by

²Rothstein et al. (2011) discuss social policy as a public goods game very intensively, calling the welfare state a "mega-sized collective action problem" (2011, 8).

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claiming: "we need an explanation for why people trust *the state* to handle risk protection and/or redistribution"³ (Rothstein et al. 2011, 4). The importance of trust in public goods games has also been promoted by Ostrom (1998), considering a behavioral approach in rational choice theories⁴, because trust works as a means to solve "social dilemmas" (1998, 12). If the state is perceived as weak and untrustworthy because of lacking capacity to extract revenue and to deliver social services, why should individuals turn towards this low-capacity entity for provision of welfare services? The overall research question that this dissertation contributes to answering is therefore: *what happens to individual social policy preferences when the context of high-income states dissolves*?

This dissertation is an analytical assessment of social policy preferences in contexts of increased uncertainty, mirrored by dysfunctional states and fragmented labor markets. The link of macro level theories to the micro level logic of preference formation is key here. It is an approach to build a micro-foundation for social policy in low- and middle-income democracies that takes into account the institutional and structural framework of the state and the labor market. In the following, I develop the theoretical argument, before I outline the relevant academic discourse that the dissertation addresses. Subsequently, I briefly discuss my contribution to the political economy literature, turning then toward case selection and the data base. The introductory chapter concludes with an overview of the four chapters and relates the research projects to the overall research objective.

The Argument

Public welfare presents a form of 'socialization of risks' (Mares and Carnes, 2009), meaning that risks of unemployment, sickness and age are carried by the society as a whole in the form of tax contributions and public provision of benefits. The argument that drives the dissertation and is pursued in four research projects questions that individuals strive for

³Original emphasis.

⁴Ostrom (1998, 14) draws the attention to the solutions individuals apply to meet social dilemmas such as collective action problems: "The individual attributes that are particularly important in explaining behavior in social dilemmas include the expectations individuals have about others' behavior (trust), the norms individuals learn from socialization and life's experiences (reciprocity), and the identities individuals create that project their intentions and norms (reputation)." Even though the approach applied in the following chapters is not a fully behavioralist approach, the general idea of 'trust', 'reciprocity', and 'reputation' implicitly drive the mechanisms that are elaborated below to some extent.

the socialization of risks in a context of increased uncertainty. Uncertainty is understood as following from an unreliable state that lacks means to handle welfare provision and redistribution and manages to counteract the informal economy that jeopardizes the public goods game⁵. The resulting deficiency incentivizes individuals to withdraw from the public welfare system to some extent (chapter 1), turning towards private goods provision (chapter 2), engaging in exaggerated welfare demand to exploit the weakness of the state (chapter 3), or using the exit option of entering the informal economy (chapter 4).

The most classical point of departure for social policy preference research is the Meltzer-Richard model (1981) (MR model hereafter), and it is also the point from which the chapters below embark regarding the importance of self-interest reflected by income for the individual. The model's prerequisite is, however, a stable institutional framework, which is not necessarily given in low- and middle-income economies. Taking into account new democracies of the Global South we can observe that, on the one hand, many states invest in the development and extension of welfare systems (Haggard and Kaufman, 2008) but, on the other hand, still lack means to cope with institutional and structural dysfunctionalities such as clientelism, corruption, a large informal economy, low fiscal capacity in terms of tax collection, weak institutions such as low enforcement capacities of the rule of law, and high rates of income inequality. These dysfunctionalities increase uncertainty and risk at the individual level because reliability of the state becomes questionable. Seligson (2002) finds evidence that corruption severely decreases the legitimacy of the state⁶. Corruption creates an environment of injustice and arbitrariness because money and personal favors decide about the individual's fate. When the political economy of a state is intervoven with clientelistic practices and corruption, then the public goods game follows a different logic, the one of kinship, networks, and bribery⁷.

⁵The general argument is also expressed in Rothstein et al. (2011). The authors point out that trust in the state is needed for individuals to turn toward the state for welfare provision. The micro mechanism is very thoughtfully explained, but the authors then study the mechanism of governmental quality on welfare output at the macro level. See also Rothstein and Uslaner (2005) and Rothstein (2011).

 $^{^{6}}$ The author studies the relationship of corruption and the perception of regime legitimacy with micro-level data for Latin America.

⁷For a very contrasting argument see Alesina and Angeletos (2005) who argue that corruption

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The taxpayer cannot expect a return for paid contributions when goods and benefits are distributed by an allocation formula that is not based on a pay and reward logic but on favors for particular elites and groups. The institutional framework of the state needs particular attention. As Huber and Stephens (2012) emphasize "compared to most advanced industrial countries [...] institutional factors in Latin America are rather unfavourable for the passage of effective redistributive policies" (2012, 63). Latin America presents the region with the most generous and developed welfare system among lowand middle-income economies, so that a major part of the dissertation is analytically situated in this region. So in how far are individuals influenced by the inability of the state to deliver social services in their welfare preferences, is the central question that I raise. Institutions matter for social policy preferences because welfare provision is dependent on efficient and reliable distribution functions (Mares, 2005; Rothstein et al., 2011). They present the channel through which welfare services are provided. Even if social policies are in place but fail to reach the individual on the pathway from *de jure* to *de facto*, discontent with welfare policy at the individual level is the likely outcome. Hence, the more often the individual experiences failure of the state to provide, the more it is likely that the individual starts to question the public goods game. Public goods provision is a repeated action so that individuals can respond to failures. I argue that social policy preferences are linked to the capacities of the state to provide these services so that demand mostly emerges with growing institutional performance. Przeworski emphasizes that institutions "matter in two ways: as rules of competition and as codes of punishment for noncompliance" (1991, 26). The institutional framework delivers the basement on which individuals in a society can build their industries and economic activities, by granting rights but also by imposing restrictions in the form of duties such as the payment of taxes. In order to be able to "engage in secure contracting across time and space" it needs 'credible commitments' from the government (North and Weingast

increases demand for redistribution in order to compensate for losses that occur through corruption. The model is however not very convincing as it is unclear how the calculation should come out even, regarding the level of welfare benefits that individuals receive in low- and middle-income countries. Kitschelt (2000) argues that clientelism can also be used as means of substitution for welfare services. According to my argumentation, this should however decrease general support for the state to engage in welfare provision and redistribution, because clientelistic practices treat only a particular group with favors and excludes the rest.

1989, 831). According to North and Weingast (1989) these credible commitments are grounded in political institutions⁸. The rule of law is of particular importance to grant credible commitments as it provides the legal framework to which every citizen in the state needs to adhere. It decreases uncertainty by defining the rules of the game that hold in a long term perspective, giving rise to a certain degree of predictability of actor behavior. The democratic system, which is a basic requirement for case selection in the chapters below, comes with a certain credibility to adhere to the rules of the game by its very definition, in contrast to regimes ruled by autocrats who can arbitrarily change the rules whenever it appeals to be lucrative. But despite transition toward democracy we can observe variance in the way states adhere to democratic standards in low- and middle-income states. It is this variance in the interpretation and execution of democratic ideals that needs consideration for welfare preferences. The incumbent government (regarding short term effects) and the state in general (regarding credibility in the long run) also need to 'convince' the individual that social policies are not only promised but also reliably carried out. In practical terms, it means that welfare benefits are securely provided when an eligible individual files an application for a certain service without being forced to pay a bribe to the bureaucrat in the public administration. When sending children to public schools, parents need to have faith that their children receive a decent education and are taken care of while they go to work. Or when in need for medical support, individuals need to be able to rely on the transparency of the service that they receive in a public hospital without being forced to pay an 'extra tax' by means of corruption. Hence, the distributive capacities of the state need to be in place to convince the individual about the merit of a welfare system that is based on taxation. This also includes a competitive party system that allows for the mobilization of interests and possibilities for extra-parliamentary organization of interests in the form of unions, for instance, so that minority groups have the chance to get heard. A stable political system with checks and balances is a prerequisite for the formulation of legitimate policies; policies have to pass through a democratic process to become legitimate.

⁸The authors trace institutional change toward the generation of credible institutions in England during the Glorious Revolution.

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Next to the capacities of the state to formulate policies and to credibly implement them, the state also needs to be able to finance public policies. Taxation is a central challenge for many low- and middle-income economies as the enduring presence of large informal economy shows, because tax collection is particularly vulnerable to corruption that undermines tax morale in society. Informal sector workers avoid income taxation, which is one of its key characteristics. Nevertheless, they have possibilities to benefit from public welfare goods such as social assistance programs. Hence, the informal economy presents a hazard to public goods provision in several ways. Observing non-compliance of others can disrupt tax behavior of formally contributing individuals (Scholz and Lubell, 1998), possibly leading to a downward spiral. Additionally, tax evasion decreases the level of public revenue that is needed to finance the welfare state. The lower the public budget, the lower are the means of the state to provide a generous welfare system.

The structure of the state and the economy, – encompassing fragmentation of the labor market into formal and informal employment –, feed back on welfare state output and henceforth, should influence social policy preferences. Individuals encounter public institutions in their everyday life in the form of public bureaucracies, media information, the police, public schools and hospitals, just to name a few. And at the same time, individuals are also aware of inefficiencies of the state when observing a flourishing black market and informal workers selling small scale products on the street. Observing such failure of the state can undermine the desire of the individual for the state to manage welfare provision and redistribution. Redistributive preferences therefore also need to be seen from an institutionalist perspective and not just from the socio-economic position of the individual on the income ladder.

The issue of state-led welfare provision becomes of particular importance when an alternative is available. In low- and middle-income economies this alternative gained prominence in the 1990's as wave of *privatization*. When public goods are turned into club goods via privatization, it also means that the distributive principle changes from one which is showing solidarity via risk pooling to an exclusive one. It appears likely that individuals turn towards private providers for welfare services when the reliability of the state is at question because of dysfunctional capacities such as a large informal economy.

A labor market that is divided by those who carry the *burden* but not so much divided when it comes to provision of *benefits*, allowing both contributors and non-contributors to benefit from public welfare goods, changes the incentive for contributors in regard to their social policy preferences. Contributors are paying for goods on which others can free-ride. Hence, for the latter group it can become appealing to turn their back against the state in favor of privatization that excludes free-riders much more efficiently. Hence, there is not just one channel through which the state can lose its appeal as responsible entity of welfare provision but two: lacking reliability to raise revenue and to distribute services and the inability to fight inefficiencies such as free-riding that put the public goods game at risk.

Finally, individuals in low- and middle-income states also need to be taken into account by their relative position in the economy, – particularly regarding their position in the labor market – and the socio-economic group they belong to, in order to understand their social policy preferences. For the OECD context this reasoning came to be the object of intensive research in insider/outsider theory (see Lindbeck and Snower, 1986; Rueda, 2005, 2006) and the academic discourse on labor market dualization (see Häusermann, 2006: Mares, 2006: Emmenegger, 2009: Rehm, 2009: Lindvall and Rueda, 2012: Rehm et al., 2012; Emmenegger et al., 2012a; Schwander and Häusermann, 2013; Marx, 2013). Insiders are understood as workers with long-term contracts and, hence, a form of secure employment while in contrast, outsiders are "either unemployed or hold jobs characterized by low salaries and low levels of protection" (Rueda 2005, 62). Usually, temporary workers and the 'a-typically' employed are subsumed under this category⁹. Insiders benefit from employment protection whereas outsiders usually cannot draw on employment related compensation when laid off. Applying this rationale of a dualized labor market to the context of developing democracies and newly industrializing countries shows that we can detect a similar type of stratification: formal and informal employment. As Schneider emphasizes for the Latin American context regarding the informal sector

⁹The discussion on conceptualization and measurement of labor market insiders and outsiders is a very recent one, differentiating between a dichotomous classification or a continuous one based on the level or risk exposure (see Häusermann and Schwander, 2010). The debate is in full swing so that a conclusion on the conceptualization of insider and outsiderness cannot be drawn at this point.

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"[l]abour relations in Latin America are atomistic and often anomic because most workers have fluid, short-term links to firms and weak or no horizontal links to other workers through labour unions" (2009, 561). Informals have lower bargaining power towards the employer because they are not organized in unions and they cannot assert their rights as their own situation is extra-legal, which makes them much more vulnerable compared to their formal counterparts. But the informal sector does not present a monolithic entity. It encompasses a very heterogeneous group of individuals and it represents at the same time the largest social class in Latin America (Portes and Hoffman, 2003). A major share of informal sector workers engage in small scale enterprises or work as street vendors in the low-income sector that is very labor intensive (see Portes and Sassen-Koob, 1987; Perry et al., 2007). However, the term informalization also includes high-income individuals who are working off the books to evade taxation and to increase individual gains for instance. Informal workers are outside of the official labor $market^{10}$ but not necessarily outside of the welfare system. They do not have access to employment related services such as unemployment benefits but they can receive support from public welfare goods that are based on means-tests for instance (e. g. Conditional Cash Transfers (CCTs)). Informal sector employment includes both deliberate choice for informal employment and involuntary capture in the informal labor market. I categorize informal workers therefore into two groups: voluntary and involuntary informal sector workers. Voluntary informal workers are those who can afford the choice between informal and formal because of bargaining power that results from higher levels of education, while involuntary informal sector workers are identified by the lack of bargaining power at the labor market (that follows from the lack of educational capacity which decrease chances to find a formal sector job, see chapter 4). The generally low degree of long term employment possibilities in Latin America is particularly visible in informal occupations where the turnover rate is very high. Their time horizons are consequently narrow due to the constraint to make a living on a day to day basis. Thus, the exposure to risk is considerably high for informal workers.

¹⁰Labor market fragmentation in Latin America has historical origins in the development of 'labor codes' (Carnes, 2014). These labor market regulations are still a central obstacle for informal workers to enter the formal labor market (see Heckman and Pagés, 2000) and hence, still influence the stratification.

The distribution of risk within society is important for welfare support as it influences the formation of coalitions between groups that are more or less exposed to risk (see Rehm et al., 2012). If we assume that informal wage earners face greater risks because of lacking means to legally enforce contracts and rights due to their extra-legal status in the economy, a different take on the welfare state should be observable for formal and informal workers. Given differences in costs and benefits of the welfare system, one can expect a difference in social policy preferences by labor market status in either the formal or informal economy. Such a polarization could hinder the formation of cross-class alliances that are important to push for welfare state expansion. Moreover, preferences do not form in a void but in a context of weak states and varying institutional quality so that we need to consider how such an environment affects preference formation in stratified labor markets. The level of analysis when studying social policy preferences in low- and middle-income democracies, therefore, needs to be adjusted to the fragmented labor market of formal and informal employment.

To summarize the argument, I raise the concern in this thesis that individual social policy preferences in low- and middle-income democracies do not fully work according to the same patterns as in high-income countries because the context in which the former individuals live in is marked by these harsh externalities that need to be factored in. The mechanism works through the interaction of the individual with the state via various experiences in people's everyday-life. Individuals experience the capacities of the state through media information, personal contact with bureaucrats, the police, when filing a tax return (or when deliberately abstaining from it), or when asked for a bribe in transaction with public officials. Knowing neighbors who work in the informal economy or interacting with taxi drivers and cleaning workers, branches that are almost entirely informal in some countries, provide the individual with an idea about the extent of the informal economy and the capacity of the state to levy tax and to fight the underground economy. Such inefficiencies and weaknesses do not remain unnoticed. Under conditions of structural weaknesses ordinary citizens are more likely to question the means of the state to handle welfare provision and redistribution so that preferences for the state to

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manage welfare services decline (chapter 1 and 2). Furthermore, social policy preferences of the individual also need to be understood from the relative position of the individual in the economy – more particularly, the individual's position in the labor market. Because low- and middle-income states face the problem of informal employment¹¹, labor markets can be considered as dualized into formal and informal employment. The stratification gives rise to diverging welfare incentives as cost and gains differ. I therefore argue that the stratification should either lead to exaggerated welfare preferences of informal workers, as short-term self-interests drive their behavior regarding chances to free-ride on public welfare goods (proposed and discussed in chapter 3). Or, in opposition to this, informalization needs to be understood as an exit option for individuals – an observable preference against the public system – when dissatisfied with the social system as such and the way the state handles welfare provision and redistribution, regarding those who can afford such a choice (proposed and studied in chapter 4). In this sense, I test two competing hypotheses on the response of the informal sector worker toward the welfare system in chapter 3 and 4.

State of the Art

In this section, I relate the objective of analysis – that is, the analysis of social policy preferences in the context of increased uncertainty – to various research strands in the comparative political economy literature that build the foundation of this dissertation. Furthermore, the discussion identifies the research gap in the literature and gives orientation of the research field to which the dissertation speaks. I start with a brief discussion on welfare state output in low- and middle-income states before I move on to the literature that studies social policy preferences.

Studies on welfare states in low- and middle-income countries gained a wider audience in the early 2000's with contributions that focused on welfare state output, mostly in the form of social expenditures. Welfare states in less developed democracies are on

¹¹Of course, informal labor is not an exclusive phenomenon of developing countries and newly industrializing countries. Countries such as Greece and Italy are also marked by a considerable share of informal workers. However, the size of the informal economy in low- and middle-income states, especially in Latin America, exceeds the amount of informal workers in advanced industrial states by far.

the rise but face a lot of challenges and obstacles. Segura-Ubiergo and Kaufman (2001) illustrate the detrimental effects of globalization and trade openness on social spending in Latin America. Rudra (2002), Segura-Ubiergo (2007), and Wibbels (2006) come to similar conclusions, emphasizing the hazards of economic pressure to welfare states in less developed countries. Wibbels (2006) reveals that low- and middle-income economies lack the means to borrow money in times of economic downturn because of high debts, and this forces governments to pursue pro-cyclical spending patterns. Also the outcome of social spending on reducing income inequality in times of expanding international market competition does not reach very compelling achievements in low- and middle-income states (Rudra, 2004). But the effect of globalization is also channeled through politics and domestic institutions as Rudra (2008) highlights, needing a more disaggregated analysis of who benefits and who loses from this dynamic in low- and middle-income states. She finds that while increasing pressure from the international market hurts the welfare system, it is not the poor who are affected the most but the middle class. Her work gives rise to the thought that it is not market integration that entirely dictates welfare state development in the Global South. Scholars also advocated the positive impact of democratic institutions for welfare state development (Brown and Hunter, 1999; Avelino et al., 2005; Huber et al., 2006, 2008), especially on public investments in education¹². Rudra and Haggard (2005) show that regime type matters for the size of the welfare state in developing and newly industrializing countries when confronting adverse effects of globalization. Democratic states still outperform authoritarian regimes in welfare generosity.

But partial partial partial for the government, the factor which has been influential for welfare states in advanced industrial nations according to the power resource approach (Huber and Stephens, 2001), appears as less dominant factor for welfare spending in less developed countries as Huber et al. (2008) indicate for the Latin American context. This can however also be explained by weaknesses of the party systems in the region and particularly of

¹²See Brown and Hunter (2004) for a study on education spending in Latin America, Hecock (2006) for a study of the Mexican case, Stasavage (2005) for an analysis of education spending in Africa, and Ansell (2008) for a large N study on developed and developing countries, who all find positive results for the democracy impact.

left parties in the 1990's and the finding that even though left-parties do not increase the level of social expenditures, they influence how expenditures are distributed (Huber et al., 2008, 2006)¹³.

This research angle provides us with important insights about the forces to which welfare states in low- and middle-income countries are exposed. A micro foundation that links macro level factors to macro level outcomes has however taken a back seat in these research contributions. Aggregating preferences of the individual to collective outcomes blurs understanding of individual preference formation as Dahl (1961) already emphasized and as further discussed by Immergut (1998, 7). Individual preferences have to be taken into account at 'their' level of analysis in order to understand the dynamic of the welfare state in the long run.

The literature that studies rise and fall of states has taken considerable interest in the study of redistributive preferences by scrutinizing distributive conflicts, linking individual incentives to revolt to costs of repression and redistribution as in the seminal works on inequality and democratization of Acemoglu and Robinson (2006) and Boix (2003). It can be seen as a first approach to build a micro framework for redistributive preferences that takes into account income inequality in less developed states. The authors discuss (with diverging conclusions though¹⁴) how income inequality influences democratization and at what levels of income inequality democracies remain stable. But research that considers the preference structure for redistribution and provision of public services in low- and middle-income democracies, that have left the phase of regime transition already behind, is only slowly on the rise. It is therefore not surprising that Mares and Carnes (2009) seize the opportunity in a review article on social policy in developing countries to call for greater attention on preference formation in the Global South. Low- and middle-income democracies face higher rates of income inequality, corruption, clientelism (e g. patronage and vote-buying), a large informal sector and varying degrees of state capacities

¹³Huber et al. (2006) illustrate in a time-series cross-section analysis that left-wing parties influence income inequality by imposing more progressive welfare policies.

¹⁴ Boix (2003) argues that inequality and democratization follow a linear relationship. In contrast, according to Acemoglu and Robinson (2006) the relationship follows an inverted U-shape curve, where democratization only occurs at medium level of income inequality. For a critical discussion on the merits of these two contributions and thoughtful empirical tests see Haggard and Kaufman (2012).

compared to advanced industrialized countries. It seems unlikely that such a context leaves social policy preferences unaffected. Dion and Birchfield (2010) and Cramer and Kaufman (2011) pioneer studies of social policy preferences¹⁵ in less developed countries. The former examine redistributive preferences in a large set of low- and middle-income economies, finding regional differences and a lower impact from economic self-interest at the individual level depending on income inequality and economic development at the macro level. The latter study individual fairness perceptions of the income distribution in Latin America and point out that tolerance of income inequality decreases with economic growth and greater income inequality¹⁶, supporting the intuition that context matters for preference formation in low- and middle-income countries. These studies draw upon social policy preference research that is rooted in studies of high-income economies, but they also show that political economy models cannot nearly be transferred to the context of low- and middle-income democracies because of differences in the constitution of the state and the economy. It is a nascent field of research that needs to figure out which theories travel well to less developed democracies and which ones need to be adjusted regarding the institutional and economic framework of less developed democracies. Consequently, this is the point of departure for the dissertation.

A more established terrain of preference research represents the field of social policy preferences in the context of high-income democracies. We can find a rich academic debate on influential factors for preference formation. The standard approach reflects the rational choice orthodoxy of the importance of income status for preference formation and its further modifications regarding the impact of social mobility, social affinity, and economic risk. The second building block of preference research addresses variation in preference formation across countries and emphasizes the explanatory power of context effects in the form of welfare regimes and income inequality.

¹⁵For studies that examine social policy preferences in single cases studies see Carnes and Mares (2013) for an analysis of welfare provider preferences in Argentina and Barr and Packard (2005) who analyze pension provider preferences in Peru. The study of Barr and Packard (2005) is one of the first attempts, to my knowledge, which investigates preferences over private versus public pension schemes in a developing country, namely Peru, based on an experimental survey in 2002, and that also tries to identify informal wage earners.

¹⁶However, they also show that the poor become more tolerant of income differences with large rates of income inequality.

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Starting with the first research strand of the preference literature, the classical starting point usually is the Meltzer-Richard model (1981) that leads to the assumption of increased redistributive preferences of the middle-income class the greater the income dispersion in society¹⁷. The personal income level influences redistributive preferences as transfers are based on taxation. The MR model predicts that redistributive preferences of the middle income group increase the further the distance between median and middle income. The high-income group rather opposes increased redistribution that raises the tax rate because they profit less from welfare provision. Hence, greater income inequality should lead to greater demand for redistribution¹⁸. In this sense, economic self-interest in terms of personal income has been identified as stable driver of social policy preferences for the high-income country context (see Corneo and Grüner, 2002)¹⁹. But it also matters in how far individuals perceive income inequality as a phenomenon that is unjust and undesirable. Particularly the U.S. presents a heavily studied case as income inequality is quite high without seemingly inducing higher redistributive preferences (see Alesina and Glaeser, 2004; Alesina and La Ferrara, 2005; Bartels, 2010)²⁰. The perception of income inequality as unjust has been identified as an important prerequisite for individuals to demand more redistribution²¹ and also with regard to the type of redistribution (e. g. should redistribution be provided according to a defined-benefit rational, need, or universally, see Reeskens and van Oorschot (2013) and Jordan (2013).

A further modification of the rational choice orthodoxy represents the inclusion of

 $^{^{17}}$ The rationale goes back to Romer (1975) as well.

¹⁸Moene and Wallerstein (2001) challenge the MR model to some extent as it omits insurance preferences which are not necessarily congruent with redistributive preferences. Individuals also consider future income (e. g. income loss because of unemployment) and hence, compensation by means of insurance, which speaks to the work on social mobility expectations such as Piketty (1995) as discussed below.

¹⁹Even though personal income influences social policy preferences the age effect can outperform incentives that follow form income depending on the field of social policy (Busemeyer et al., 2009).

²⁰Regarding principles of justice see also Benabou and Tirole (2006) who consider justice norms and how the perception of justice in terms of optimism or pessimism differs across countries leading to difference in redistributive expectations. See also Linos and West (2003) and Blekesaune and Quadagno (2003).

²¹But it becomes also more difficult when considering the multidimensional space of party competition and issue salience. Low-income individuals might not vote for increased redistribution, even though this would be beneficial for them, because they cast their vote based on a different issue such as religion (Roemer, 1998). In this regard it also matters how well informed individuals are about redistributive policies and in how far they are able to link income inequality and social policy (Bartels, 2005, 2010).

social mobility expectations in the analysis of welfare preferences. The relative position of the individual in the economy also matters for expectations on redistribution and the tolerance of income inequality as visualized in the famous tunnel theory of Hirschman and Rothschild (1973). They claim that observing others moving ahead (economically speaking) because of a favorable general economic development of the national economy, while nothing happens to one's own economic situation, leads to discontent and a declining tolerance toward income inequality. Thus, individuals do not only take into account current income when voting on redistributive policy but also past income experience plays a role (Piketty, 1995)²². These mobility expectations also work in a forward looking perspective. If individuals expect to become rich in the future they do not demand increased redistribution now as it would harm their future income, in what has become known as the POUM hypothesis ('prospect of upward mobility') of Benabou and Ok (2001). What we learn from this literature²³ is that mobility expectations are crucial for social policy preferences and the chapters below take these findings into account in different ways. Especially mobility expectations regarding the sector of employment – formal or informal – presents an interesting object of analysis in light of this research, but means to measure these transitions empirically, are so far limited. A direct measure of social mobility expectations for the context studied below is generally limited by the availability of data.

What neatly connects to this strand of research are studies that consider risk exposure, meaning that individuals consider whether future income becomes at risk due to the labor market situation (see Cusack et al., 2006; Rehm, 2009, 2011; Rehm et al., 2012) and one's own employability (Iversen and Soskice, 2001). It matters on the one hand how secure employment is considering not only volatility of sectors (see Iversen and Soskice, 2001, regarding skill specificity) but, more specifically, volatility among occupations (see Rehm, 2009). On the other hand, it also makes a difference if individuals are labor

²²Margalit (2013) recently showed with panel data for the U.S. context that the experience of job loss has a strong impact on welfare preferences. Individuals are more favorable of welfare spending when they have experienced unemployment.

 $^{^{23}}$ A range of contributions followed this literature. Gottschalk and Spolaore (2002) derive differences in gains of mobility that influence the individuals' choice to invest in mobility in the U.S. and Germany based on a formal model.

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market insiders or outsiders (see Saint-Paul, 1996; Rueda, 2005, 2006; Häusermann, 2006; Emmenegger, 2009; Burgoon and Dekker, 2010; Emmenegger et al., 2012b; Schwander and Häusermann, 2013)²⁴. The exposure to risk is central for insurance needs which can compete with short term monetary gains so that income is not necessarily the main driver for welfare preferences (see Moene and Wallerstein, 2001). In the analysis of formal and informal workers welfare preferences I discuss preference formation under the auspice of a fragmented labor market and differences in risk exposure. Starting from this strand of research I elaborate expectations on preference formation by labor market group, adapting the insider-outsider rationale to the low- and middle-income country context.

Finally, a further direction within this framework, that also challenges the orthodox rationale choice assumption to some extent, is the analysis of cross-class alliances and institutional factors that facilitate the formation of such coalitions (see Iversen and Soskice, 2006) as subsumed under the label 'social affinity'. As Shayo (2009,168) argues "[b]ecause policies affect group status, political preferences may reflect identity concerns and not just economic self-interest"²⁵. Alesina and Glaeser (2004) illustrate how ethnicity influences redistributive preferences in the U.S.. Individuals are more willing to accept redistribution when their own ethnic groups also receives transfers. Lupu and Pontusson (2011) emphasize that individuals are other-regarding and identify with social groups based on different distinctive features such as class, which come into play when individuals form distributive preferences such as on taxation and social service provision. Social groups form along ethnic lines (Luttmer, 2001; Alesina and Glaeser, 2004; Baldwin and Huber, 2010), religion (Scheve and Stasavage, 2006)²⁶, national identity (Shayo, 2009),

²⁴A recent contribution of Singer (2013) shows that economic insecurity also matters for economic voting in Latin America and Eastern Europe. Individuals who perceive their own income situation as very risk prone are more likely to punish the incumbent government when the state is unable to stimulate economic growth.

²⁵This thought draws upon Luttmer (2001), and is further addressed by Alesina and Glaeser (2004), and Amat and Wibbels (2009) who have recently illustrated the relevance of group identification on redistributive preferences.

²⁶Religiosity exerts a stable negative impact on redistributive preferences (Scheve and Stasavage, 2006; De La O and Rodden, 2008). Religiosity places greater emphasis on private care (e. g. in the form of the family or the religious community) so that individuals turn less toward the state for welfare provision. This can be further disaggregated by religious denomination as there is also variation in how far different religions influence welfare preferences of the individual.

or income group (Lupu and Pontusson, 2011)²⁷, which can lead to solidarity among group members as these studies have observed. Thus, maximizing one's own status is not necessarily the main driver behind social policy preferences, but rather increasing the status of the entire social group one identifies with²⁸. Drawing upon part of this literature I contest the idea of cross-class alliances between different income groups and the informal sector in chapter 2.

As the insider-outsider debate shows, welfare institutions and policies, such as unemployment insurance, influence the level of risk exposure. The second building block of social policy preference research therefore emphasizes the importance of context effects for preference formation. Gingrich and Ansell (2012) study how welfare institutions affect the importance of individual-level risk when it comes to social policy preferences. The more "uniformity in risks" (2012, 26) and the more individual welfare is dependent on the state, the less matters individual risk emerging from skill specificity and the level of education. Scholars have come to the conclusion that the context individuals live in needs to be accounted for in the analysis of welfare preferences in terms of income inequality, economic growth (see Alesina and La Ferrara, 2005), and welfare regimes²⁹. Just as macro level theory needs a micro foundation, so does micro level theory also need to be linked to the contextual structure of the state and the economy. As Esping-Andersen emphasizes "[t]he welfare state is not just a mechanism that intervenes in, and possibly corrects, the structure of inequality; it is, in its own right, a system of stratification. It is an active force in the ordering of social relations" (1990, 23). Hence, researchers have traced back the influence of welfare regimes or specific social policies 30 on social policy preferences (Svallfors, 1997) agreeing that there is variation in public opinion across different types of welfare states (Andreß and Heien, 2001; Arts and Gelissen, 2001; Blekesaune and Quadagno, 2003; Linos and West, 2003; Jæger, 2006; Larsen, 2008;

 $^{^{27} {\}rm In}$ line of this research see also Scervini (2012) who argues that the relative distance between the income groups matters, rejecting the Median-Voter hypothesis.

²⁸Lupu and Pontusson (2011) refer to "social affinity" (2011, 318). It is an altruism which is "directed at in-group members only", as Shayo (2009, 148) emphasizes.

²⁹Not only welfare policies matter for social policy preferences but also context effects such as globalization affect individuals in their attitude toward social policies as Walter (2010) has indicated.

 $^{^{30}}$ See also Goerres and Tepe (2010) who study preferences for childcare policies.

Jordan, 2013)³¹. Considering the effect of income inequality on redistributive preferences, scholars found empirical support for the MR rationale at the individual level (Finseraas, 2009; Dallinger, 2010; Jæger, 2013; Busemeyer, 2013)³². Increasing levels of income inequality stimulate welfare demand.

While welfare policies, income inequality, and economic development have been identified as relevant context factors in the literature the role of the state has only played a minor role so far. Initial thoughts on the importance of state performance for welfare demand can be found in the analysis of Mares (2005, 644), who studies how economic volatility affects levels of social insurance expenditures in a cross-country analysis, asking if state capacity mediates the effect of economic insecurity on social insurance. She raises the objection that "in the presence of an 'inefficient' state, the high-risk sector might find state-administered social policies unattractive" so that welfare demand holds off despite the need for protection among workers who are exposed to risk. Her work triggers the idea that a state, which lacks reliability to deliver social services, might undermine demand for state-led welfare provision – the point of departure of the dissertation. The importance of governmental performance for welfare demand has also been addressed by Rothstein et al. (2011) and Rothstein (2011). The authors argue that individuals need to have faith in the government to deliver services in times of need in order to push for greater welfare provision³³. As detrimental for trust (toward others and the state) the authors identify income inequality and corruption 34 . Existing research has neglected so far to study the

³¹Scholars also drew the attention on a feedback loop between welfare demand and social policies. Depending on responsiveness of political parties, social policy preference should influence the design of social policies which again feedback on welfare preferences once they are implemented (see Brooks and Manza, 2006, 2007). But it also takes time for public opinion to arrive on the political platform, particularly in low- and middle-income countries where party systems are more fragile. These feedback loops are therefore less concerning for the analyses studied below. Nevertheless, political responsiveness to social policy preferences in low- and middle-income democracies poses a research gap that needs further research.

³²Busemeyer (2012) looks at the case of education policy and finds evidence that inequality also influences preferences on public spending on education.

³³They contest power resource theory which claims that the welfare state is an outcome of working class mobilization by adjusting the argument: Trustworthy institutions are needed to channel labor mobilization.

³⁴All factors reinforce each other and it is difficult to pinpoint the causal mechanism. Already in an earlier contribution Rothstein and Uslaner (2005) argue that corruption, inequality and trust are interrelated so that governments foster an exclusionary welfare state in a setting of high corruption, high inequality and low trust which also presents a very stable, 'bad' equilibrium.

impact of state performance on social policy preferences at the individual level and mostly focused on high-income states, even though the literature on tax compliance has already addressed the issue of institutional performance for tax behavior. Performance of the government and the institutional framework of the state (e. g. labor market regulations) matter for tax compliance (Alm et al., 1992; Djankov et al., 2002; Feld and Frey, 2007; Torgler and Schneider, 2009) which influences the level of available tax revenue to finance social policy. Returns for paid contributions increase the individual's willingness to comply. The dissertation is situated at this intersection, investigating in how far the capacity of the state – to raise revenue and to deliver social services influence – increases welfare preferences or in turn, decreases the individual's willingness to participate in the public goods game of social policy. Building upon the above mentioned findings of social policy preference research from the high-income country context I address these theoretical arguments in the context of low- and middle-income democracies.

Contribution

The dissertation speaks to the comparative political economy literature on social policy preferences, labor market fragmentation, and tax compliance. The contribution can be grouped into four major components: (1) the consideration of the institutional context, in terms of the capacities of the state to handle welfare provision and redistribution, for preference formation, (2) the adjustment of the level of analysis to the labor market divide in low- and middle-income states, that is formal and informal wage earners, (3) endogenizing the state as responsible entity for welfare provision regarding the alternative of private goods provision and exit options (e. g. the informal economy), and finally, (4), applying and adjusting theories from political economy research of the high-income country context to developing democracies. The underlying logic of actor behavior in the dissertation is the assumption that individuals make rational decisions and act strategically, taking into account the behavior of other actors.

Regarding the first point, I develop the argument that reliability of the state to manage welfare provision with regard to the low- and middle-income country context

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is key for individual social policy preference formation. I link macro level factors to micro-level theory to generate a more encompassing theoretical approach of social policy preference formation in the developing country context. The state needs to convincingly manage welfare provision for individuals to turn toward the state (chapter 1). I illustrate empirically that the institutional framework that enables credible commitments increase redistributive preferences and demand for state-led welfare provision, mostly in low- and middle-income democracies but also even to some extent in high-income countries. But it is not only the state to which individuals need to have faith to be a reliable actor in the public goods game. Also the informal sector, illustrating a set of actors who defect from the public goods game, influence social policy preferences of the individual, as illustrated in chapter 2. And finally, the analysis reveals in chapter 4 that individuals turn against the state in their welfare preferences (by entering the informal sector) when dissatisfied with public goods provision and when the state lacks reliability in terms of institutional strength.

The second contribution (2) of the dissertation is the inclusion of the informal sector as a phenomenon that has not been addressed in the social policy preference literature so far. I make the informal sector a major theme of the dissertation as it has central implications for the incentive structure of individuals and their cost-benefit calculations. The study illustrates that informality comes along with greater economic insecurity and risk, which however do not translate into exaggerated welfare demand. Informals rather present a group that is, to some extent, disappointed by the state and opts-out if the financial means allow such a choice. The insider-outsider debate has so far circled around labor markets of high-income democracies. This contribution transfers the concept of insiders and outsiders to the low- and middle-income country context, arguing that outsiderness is here mainly marked by employment in the informal sector while insiders are represented by formal workers who are known to the regulatory system and protected by labor law. The theoretical discussion also contributes to the insider-outsider debate by questioning the boundaries of the concept and exhibiting the applicability to the developing country context where informalization as additional form of employment plays a prominent role. The discourse on fragmented labor markets in low- and middle- income

states evoked below also sheds light on the need to study this hard-to-capture group of informal workers, who make up a large share of the society in developing and emerging economies, not only in terms of social policy preferences but also with regard to voting behavior and party preferences as chapter 3 briefly alludes to.

Turning to point (3), the thesis also speaks to the more general question why individuals turn to the state in need for social protection considering alternatives such as the market³⁵ (as studied in chapter 2) or private, informal insurance strategies as alluded to in chapter 3. A theoretical argument is generated that links performance of the state to make credible commitments (in the form of institutional strength) to provide support in times of need, to the exit option of entering the informal labor market when dissatisfied with state-led welfare provision in chapter 4. The empirical analyses in all four chapters constantly support the importance of state performance for individuals to turn towards the state with their welfare demand and their redistributive preference.

Finally (4), I broaden the academic discourse on social policy preferences by applying political economy theories on welfare preferences to the low- and middle-income country context showing that while some theories do travel well, others have to be refuted or at least be adjusted to the context in which people live in. Studies on redistributive preferences focusing on advanced industrial nations illustrate that income inequality at the context level influences preferences as expected according to the MR model (see Finseraas, 2009). Such an effect is however hard to find for the Latin American region, despite the tremendous rate of income inequality³⁶. The analysis in chapter 1 hints

 $^{^{35}}$ The research field that considers individual preferences for public versus private welfare provision in less developed democracies has so far been rather neglected. For a recent contribution see Denisova et al. (2009).

³⁶Latin America presents a puzzle in this regard. Despite high rates of income inequality, welfare state output remains rather humble. That the MR model does not always work at the macro level regarding welfare state output has been extensively discussed in the literature (Milanovic, 2000; Kenworthy and McCall, 2008). But that inequality also lacks to stimulate social policy preferences in low- and middle-income countries (mostly Latin America as studied below) is surprising. The theoretical contribution of Acemoglu and Robinson (2006) might allude to an explanation to this observation. The authors make the case for an inverted U-shaped effect of inequality on democratization. Only at medium level of inequality do individuals push for democracy, while very equal societies or very unequal societies do not reach this momentum to revolt (very much simplifying the more complex mechanism that the authors develop). Even though we are dealing here with countries that are already democratized, the missing impact of income inequality to push for greater welfare provision might be a lack of cross-class coalitions in very unequal societies or, as Cramer and Kaufman (2011) show, an increased tolerance for inequality, particularly among the poor, when inequality is very high. It also depends on the perception of inequality

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toward the intuition that preference formation works differently in developing countries where the prerequisite of a stable institutional framework and well-organized economy are not given.

The analysis also bears limitations that are imposed by the boundaries of the available data. The analyses pursued in the chapters below mostly focus on a cross-section at one or two particular time points. However, ideally we would need a panel data structure to study social policy preferences of individuals over time in order to capture variances in risk exposure during the individual's life cycle. Even though labor market volatility decreased in Latin America in the last decade, it is not unlikely that some individuals switch between formal and informal labor market during their employment history. These fluctuations could not be accounted for so far, despite its possible impact on social policy preference formation, keeping the literature on social mobility expectations in mind (Piketty, 1995; Benabou and Ok, 2001). Furthermore, it is so far difficult to assess the character of welfare provision in low- and middle-income states in terms of the degree of progressivity or regressivity. It is of course likely that the character of welfare provision influences preference formation, but information to evaluate progressivity and regressivity of social policies in a cross-country setting of less developed democracies is so far limited, as will be further discussed below in the section A Brief Note on Data. Data collection is therefore a central task for future research in order to capture these variations.

Case Selection

The analysis of social policy preferences starts with a broad examination of preference formation in low- and middle-income democracies in general compared to high-income states before the focus is narrowed down to the set of Latin American (and Caribbean) democracies in the subsequent chapters. The comparative approach and the selection of cases is driven by theoretical considerations of the particular research interest in each chapter, but it also follows a general rationale that should be laid out in this part.

as something unjust for individuals to react upon it (Lübker, 2007). Gaviria (2007, 30) finds empirical support for the assumption that "pessimistic views on social justice" decrease approval for redistribution in the Latin American context. Further research on income inequality and redistributive preferences in low- and middle-income states is needed.

The overall case selection criteria is the regime status of democracy. Welfare services are also provided in autocracies – Saudi Arabia serves as a good example here, because the state even provides a very generous set of social services –, however, the important difference to democratic welfare states is the financing of social programs. In the latter case it mainly follows from oil rents and not from taxation and the goal of welfare provision is also crucially linked to the oppression of social unrest and distributive conflicts that can endanger the incumbent ruler (see Boix (2003) on the 'cost of repression'). The objectives of the analysis of social policy preferences are demand for state-led welfare provision and preferences for redistribution in a context where individuals, at least theoretically, pay for the welfare state via taxation and can hold the government accountable for the performance on social policy via elections. As Przeworski argues, in democracies "all forces must struggle repeatedly for the realization of their interests" (1991, 14), so that, ideally, individuals are not overwhelmingly favored by kinship and cronyism in democracies. All citizens stand equally before the law and have the chance to mobilize their interest and are backed by a regulatory framework. Hence, only in democracies can we expect individuals to develop social policy preferences on a cost-benefit rationale that considers pay, in the form of taxation, and reward, in terms of welfare provision, as exercised below (see also Boix, 2001). In contrast, the micro logic beneath welfare demand should significantly diverge in authoritarian states that use different mechanism of financing (e. g. from natural resources) and benefit distribution, that promote distinguishable incentive strategies.

One might argue at this point that the criteria of democracy stands squarely to the intention to analyze preferences in low- and middle-income economies where most states are arguably struggling to fulfill the image of full-fledged democracies. Clientelism and its sub-categories of patronage and vote-buying are very sticky phenomena in many Latin American countries and also corruption is present in a large number of countries that are studied here. The interest of the analysis lies however at the very heart of this imperfection, examining social policy preferences in systems that are considered to follow a basic proportion of democratic rule but vary in the level of state capacity. Furthermore, as Lake and Baum (2001) have illustrated, democracy also exerts a positive impact on

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the development of the welfare state, so that the object of analysis is also more likely to be found in democratic states. This is why a threshold level of a minimum level of democracy is chosen, using information provided by the PolityIV project to identify democratic systems. Marshall et al. (2010) recommend the threshold value of +6 to identify democractic regimes. The PolityIV index ranges from -10 to +10. Negative values signal an authoritarian regime structure and the value +10 stands for the highest level of democracy. To evaluate the level of democracy Marshall et al. (2010, 14) base the measure on the "presence of institutions and procedures through which citizens can express effective preferences about alternative policies and leaders", on "the existence of institutionalized constraints on the exercise of power by the executive" and on "the guarantee of civil liberties".

The criteria of a minimum level of democracy influences case selection most strongly in chapter 1 which examines low- and middle-income democracies in comparison to advanced industrial nations, where a number of countries drop out of the empirical analysis as they do not meet the requirement. Furthermore, as chapter 1 uses survey data from the World Values Survey (WVS), to test the theoretical framework, case selection is naturally also limited to the countries covered by the WVS. The coverage of low- and middle-income economies was significantly expended in the last two survey waves, but so far it still does not provide a full coverage of all countries.

After the broad cross-country analysis of individual social policy preferences in both developing and high-income democracies I restrict the analytical focus on the Latin American region (chapter 2-4). The study of Linos and West (2003) already brings in the idea that social policy preferences do not necessarily follow similar patterns in all regions of the world (see also Dion and Birchfield, 2010), because of different paths that lead to the development of welfare regimes that are in place and diverging cultural takes on normative understandings of distributive justice (see also Reeskens and van Oorschot (2013) with regard to justice principles). As this claim also finds support in chapter 1, I continue the analysis of social policy preferences in Latin American democracies. The region stands out as an ideal field for social policy research in low- and middle-income democracies for three reasons. First, most Latin American states nourish a welfare

system that also fulfills the basic requirements of the concept by providing a minimum of social security³⁷. Today, Argentina, Brazil, Chile, Costa Rica and Uruguay stand out as welfare state high-performer (Huber and Stephens, 2012)³⁸. In the early 1920s several Latin American states developed social security systems for the workers in the public administration, the military, and elites (Mesa-Lago, 1990; Haggard and Kaufman, 2008) and social security still illustrates the big bulk of welfare expenditures in most Latin American economies. Second, after the debt crisis in the 80's and the previous ups and downs of democratic transitions, international financial institutions (IFI's) – among these are most prominently the World Bank (WB) and the International Monetary Fund (IMF) – pushed through a range of neoliberal reforms in the 1990's that came to be known as the Washington Consensus that sensitized the Latin American public for the topic of public goods provision. The reforms were also a response to the decades of inward looking import substituting industrialization (ISI) that detached Latin American economies from the world market. Following structural adjustment programs (SAP) governments cut down government programs and privatized a range of public enterprises responsible for the provision of water, electricity or telecommunication (on the latter aspects see Murillo, 2002). Welfare programs were privatized as well, particularly regarding the pension system (Madrid, 2003; Brooks, 2007), building private pension fonds that are managed by Administratoras de Fondos de Pensiones (AFPs) for instance. Chile quickly moved to the top of the reformers in the region and still has the most thoroughly privatized welfare system in national comparison in the region. The Latin American public has therefore experienced a decade of harsh reforms in the welfare sector so that we can assume that individuals have developed preferences on the issue of the scope of social policies and the type of provider – state or market (see chapter 2). Nevertheless, the last word on privatization reforms has not been said yet. Some governments are starting to re-nationalize former state owned enterprises such as the pension funds in Bolivia

³⁷For descriptive information on the scope of social security and social assistance programs in the region see Social Security Agency (2008).

³⁸Also Pribble (2011, 193) finds in a cluster analysis that these countries (with the exception of Uruguay) form a welfare regime that manages well to prevent individuals from risks. She builds a typology of Latin American welfare states making out the difference in the states' capacities of "risk prevention" and "risk coping".

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and Argentina (Carnes and Mares, 2013). Hence, especially in the last decade, which presents the time frame of empirical investigations applied below, have individuals been intensively confronted with the discourse on welfare provision and the question of who is the responsible entity for risk prevention and at the same time a capable entity to fulfill these expectations. Next to welfare state reforms, Latin America still remains the region with the highest level of income inequality (De Ferranti et al., 2004). If nothing else drives individuals to deal with the welfare state then the income distribution should finally be a strong influential factor according to political economy theory. And finally, the third aspect that supports the selection of Latin American democracies as cases for cross-country analysis is the large informal economy. How the fragmentation of the labor market into contributors (formals) and non-contributors (informals) affects social policy preferences is of particular interest in chapter 2, while chapter 3 and 4 delve deeper into the preference structure of formal and informal wage earners. The World Bank study of Perry et al. (2007) pursues a thorough investigation of the informal economy in the region and shows that the phenomenon is present all over the continent, however, also with decisive variation. To sum up, the criteria of long-term experience with welfare regimes (1), a population that has been made alert to the question of public welfare goods versus club goods (2), and the presence of a fragmented labor market due the dominant and sticky phenomenon of the informal economy (3) motivate the case selection of the Latin American region for the dissertational research.

Before I turn the introduction of data sources on which basis the analyses are pursued I briefly present key elements of the Latin American region with regard to the comparability within the region. Latin American states are marked by the presidential regime type (Mainwaring and Shugart, 1997), which serves as a scope condition in the analyses of social policy preferences in Latin America below. Party systems lack long-term experience due to ups and downs of democratic transitions and fall backs into authoritarian rule during the 20th century. Even in the last fifteen years have party systems in some countries experienced tremendous breaks such as in Peru under Fujimori, in Bolivia under Evo Morales, or in Mexico after the first defeat of the longtime hegemonic party – the PRI – in the presidential elections of 2000 so that electoral volatility reached a very high

level (see Roberts and Wibbels, 1999)³⁹. The period of neoliberal reforms also influenced party's strategic appeal to voters in the 1990's so that elected parties not always pursued economic and social policies according to their electoral campaign before the elections as the study of Stokes (2001) has proven. Nevertheless, Latin American parties and citizens follow a general left-right semantic to orient themselves in the political space (see Zechmeister, 2006)⁴⁰. The identification of citizens by economic class has however eroded in the region, class is not a central cleavage anymore according to observe a decline of the class cleavage. Despite high income inequality and the difficulty of upward mobility it is also puzzling for welfare state researchers that income redistribution is still at a modest level. In spite of the 'rise of the left' in Latin America in the last decade, only a limited number of countries distinctively increased investment in social policy (see Levitsky and Roberts, 2011).

Social policy is to a large extent regressive in LA. It favors the already better off, which has historical roots regarding the groups of ruling $elites^{41}$, and only slowly started to engage in the expansion of coverage with Conditional Cash Transfers (CCT) programs and social assistance that are not bound to formal employment (see Lindert et al., 2006). Income tax is much below the international average in Latin America (cf. Ardanaz and Scartascini, 2013; Segura-Ubiergo, 2007) so that Latin American governments also rely on value added taxation (VAT)⁴² to finance the welfare system. Social security systems in

 $^{^{39}\}mathrm{For}$ an overview on developments of party systems in the 1990's and 2000's in Latin America see Sanchez (2008).

⁴⁰For further research on ideological self-placement on the left-right scale in Latin America see also Luna and Zechmeister (2005); Zechmeister and Corral (2013); Harbers et al. (2012).

⁴¹A recent contribution from Huber and Stephens (2012) provides a thorough analysis of the historical development of the Latin American welfare systems (see also Huber, 1996; Haggard and Kaufman, 2008).

⁴²For an overview of tax revenue generation in Latin America compared to the OECD overtime see Segura-Ubiergo (2007). Indirect taxation based on VAT is a more efficient form of taxation – a conclusion, which is drawn from influential work in public finance and public economics (see Atkinson, 1977) so that low- and middle-income countries also rely on this form of revenue generation (see Atkinson, 2003). But as the discourse on tax salience and "fiscal illusion", dating back to the seminal contribution of Buchanan (1967), has also revealed indirect taxes are much less visible and recognized by the individual (see chapter 2). Finkelstein (2009) empirically demonstrates this mechanism using the example of toll collection which has been changed from manual to electronic systems in some federal states in the U.S.. She finds that price increases of the electronic toll system do not affect driving behavior of the individuals compared to price increases in manual toll systems. So we can assume that income taxation plays a role for Latin American citizens.

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the region usually follow the Bismarckian style; benefits are bound to formal employment. CCTs step in to some part by providing elderly care that is available to non-contributors as well based on means-tests (Barrientos, 2006). But countries like Bolivia that provide a universalistic scheme (Müller, 2009) still remain outliers. Scholars of political economy that focus on the Latin American continent such as Lloyd-Sherlock (2009) argue that inequality remains durable because the welfare state does not effectively reach those who are in need, but others also illustrated that globalization and shocks at the international market put Latin American welfare systems under stress (Segura-Ubiergo and Kaufman, 2001; Wibbels, 2006), which also has historical reasons in the design of economic policies according to Wibbels and Ahlquist (2011). The shortage of monetary resources in times of economic downturn aggravates the means of the governments to provide compensation for experienced losses that follow the economic trend. Welfare states in the region therefore oscillate between attempts to fight against poverty and high rates of income inequality (De Ferranti et al., 2004; Goñi et al., 2011) by extending social assistance programs (e. g. the recent trend of CCTs) and the need to cope with economic downturns and the change of production sectors. At the same time, Latin America currently experiences a new strengthening of left parties and a rise of left governments (Levitsky and Roberts, 2011; Huber and Stephens, 2012) and a renationalization of pension programs (Carnes and Mares, 2013). The hitherto unsolved questions of how to reduce income inequality, how to repel the informal economy and how to decrease poverty make the Latin American region a central case of welfare state research.

A Brief Note on Data

As the overarching interest of the dissertation is on individual social policy preferences I make extensive use of cross-country survey data. Chapter 1 uses the World Values Survey because of the broader scope of country cases that is employed to meet the needs of the theoretical framework. In Chapter 2 and 4 I make use of the Latinobarómetro while chapter 3 is based on survey data from the Latin American Public Opinion Project. All three datasets are frequently used in academic research and published in studies of
high rank. Furthermore, I employ a range of macro variables to measure the scope of welfare provision. I will start with a brief introduction of the public opinion surveys and then add a short description on macro level data. The statistical software used to test the hypotheses throughout the chapters is STATA 12.1.

The World Values Survey (WVS) is the largest standardized public opinion survey in terms of the number of participating countries and has been used for academic research on redistributive preferences by renown scholars in this field (e.g. Alesina and Giuliano, 2010; Walter, 2010). The WVS has been launched in the early 1980's together with the European Values Survey (EVS), the former covering a number of Non-European countries that rose from 20 countries, to a total of 67 in the fourth wave, and 54 participating countries in the last available round (wave V). The sixth wave is currently out and is scheduled to be finished in 2014. The five previous waves have been conducted in the following irregular intervals: 1981-1984, 1989-1993, 1994-1998, 1999-2004, and 2005-2008⁴³. The last two waves (IV and V) cover the largest number of low- and middle-income economies so that chapter 1 focuses on these two waves. The survey is intended to capture values and attitudes of individuals on a number of socially relevant topics⁴⁴. Survey items are repeated in each wave but also frequently extended with new questions.

The Latinobarómetro (LAB hereafter) is a standardized public opinion survey carried out in 18 Latin American states⁴⁵ on an annual basis by the non-profit NGO Latinobarómetro Corporation. An approximate number of 1,200 individuals are sampled in each country based on probabilistic sampling strategies (Latinobarómetro, 2013*a*). Since the LAB only employs a standard set of socio-demographic items that are repeatedly asked while items on attitudes and perceptions on different political or societal issues vary each year and are only irregularly repeated, it is not possible to study individual preferences over time with a pooled panel design. The following countries are covered by

 $^{^{43}}$ The integrated file covering four waves includes a total of 80 countries as not all countries participated in all years while new ones were added.

⁴⁴Inglehart and Welzel (2005) famously used the WVS for their modernization theory that is based on a cultural approach. The authors argue that democratization is based on cultural change together with economic development.

 $^{^{45}\}mathrm{When}$ it was launched in 1995 it started with only 8 countries and was gradually expanded over the years

the LAB: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela.

A further cross-country survey of the region, the Latin American Public Opinion *Project* (LAPOP hereafter), is hosted by Vanderbilt University, initiated by the sociologist and Latin Americanist Mitchell Seligson. The LAPOP survey (also called the AmericasBarometer) covers 26 Latin American and Caribbean states, including the U.S. and Canada which are however not considered in the analyses $below^{46}$. The annual survey was launched in 2004 with 11 countries and expanded to 24 participating countries in 2008, before Trinidad and Tobago and Suriname could also be added in 2010 so that 26 countries are surveyed in the recent waves. LAPOP conducts the survey based on the same battery of items so that observations over time are possible (however not in a panel structure). Nevertheless, even though the general set of items remains the same, new items are frequently added so that LAPOP is frequently extended. The statistical quality of the data is ensured through pre-testings of the items and probability sampling strategies. Academic work using LAPOP data has been published in a range of prestigious peer-reviewed journals⁴⁷. The public opinion survey covers the following Latin American and Caribbean states: Argentina, Bolivia, Belize, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, El Salvador, Suriname, Trinidad and Tobago, Uruguay and Venezuela.

I employ three different public opinion datasets in the dissertation, and more particularly, two different surveys for the Latin American region. This diversification follows several reasons. First of all, the usage of a range of different sources increases robustness of the findings, since some analytical aspects studied in this dissertation are object of discussion in several chapters. Second, variables of interest such as preferences for private versus public provision of social services, as studied in chapter 2, or questions on tax

⁴⁶I am grateful to the Latin American Public Opinion Project (LAPOP) and its major supporters (the United States Agency for International Development, the United Nations Development Program, the Inter-American Development Bank, and Vanderbilt University) for making the data available.

⁴⁷For recent work see Bateson (2012) in American Political Science Review or Harbers et al. (2012) in Comparative Political Studies.

behavior and tax morale as used in chapter 4 are not inquired in LAPOP but in the LAB. In contrast, the items for redistributive preferences and welfare demand as studied in chapter 3 are to some degree more persuading in the LAPOP survey compared to the LAB and it covers a larger set of countries, which is necessary regarding statistical procedures applied in chapter 3 where the sample is divided by labor market status.

The research projects conducted below share the assumption that individual preferences are influenced by institutions and context. The operationalization of the main variables of interest in each chapter will be sufficiently discussed below so that, in order to avoid redundancy, I focus on only one particular measurement that occurs in several chapters, that is the scope of the welfare state. Researchers who study welfare regimes in high income economies have developed several measures to assess the generosity of the welfare state. Social spending data started as a relevant entity, but soon scholars pointed out that mere spending data does not tell us enough about the character of the welfare state (see e. g. Scruggs and Allan, 2006; Kittel, 2006). It matters how and according to which pattern social expenditures are distributed. The degree of welfare state universalism cannot be captured with expenditure data. The tax system is regressive in Latin America⁴⁸ but also the welfare system is marked by regressivity. The replacement rate or an index for welfare state generosity (Scruggs and Allan, 2006) have become more common measures for welfare state research. However, data quality and availability limits the possibility to use the same measurement strategies for welfare states in lowand middle-income economies. A recent strand of research hence concentrates on the development of welfare regime typologies and classification of the economies to start with an overall classification of the type of welfare states and capitalism we are dealing with in developing countries in contrast to advanced industrial states⁴⁹. But scholarly work also addressed variation within the Latin American continent (see Rudra, 2007), creating welfare regime typologies of Latin American welfare systems. Rudra (2008)

 $^{^{48}}$ Taxes are not so very redistributive (Goñi et al., 2011), the heavy-lifting comes from public transfers.

⁴⁹Schneider (2009) develops a further category for the Latin American welfare states in the Varieties of Capitalism (VoC) framework, identifying Latin American economies as HMEs - hierarchical market economies - regarding business relations, skill formation and the labor market, explaining high rates of inequality with this hierarchical structure of the labor market and the economy in Latin America (Schneider and Soskice, 2009).

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provides an approach to classify welfare states in less developed countries by dividing welfare states into "productive" (the welfare state supports participation in the labor market), "protective" (the welfare state is meant to protect individuals, especially at the labor market) and "dual" welfare states, similar to Franzoni $(2008)^{50}$ who entirely focuses on Latin America. Also Pribble (2011) generates a regime typology based on cluster analysis. Similar to Rudra (2008) and Franzoni (2008) she uses proxies for the scope of the welfare state such as school enrollment data (primary and secondary) and information on the neonatal mortality rate to estimate the impact of education and health care expenditures, and pension coverage data of Rofman et al. (2008) to proxy the scope of social security programs⁵¹. Already the number of approaches (it has to be noted that the approaches mentioned are far from exhaustive⁵²) to cluster welfare regimes shows that the scholarly debate is far from consensual on the classification of Latin American welfare states into a typology, which is substantiated by the fact not only the theoretical approach but also the group compositions vary a lot. This is why the analysis below rather uses an encompassing approach on the Latin American welfare state, making use of different proxies for the scope and reach of the welfare state as promoted in this strand of research, without clustering welfare states according to regime typologies. I apply different strategies to measure the scope of the welfare state, starting with the most conventional one for low- and middle- income states: social expenditure data. Annual data on the total amount of social spending, spending on education, health care, and social security are provided by the Economic Commission for Latin America and the Caribbean (ECLAC; or CEPAL for the Spanish acronym) (see chapter 2-4) and also by the International Monetary Fund (IMF) in the Government Finance Statistics (GFS) (chapter 1). Furthermore, in chapter 4 I use school enrollment, the neonatal mortality rate, and pension coverage data as proxies for the scope of the welfare state. Statistical measurement of the latter is still in a nascent phase so that data on pension coverage of

⁵⁰Franzoni (2008) classifies Latin American states into "state-targeted", "state-stratified" and "informalfamiliarist" welfare regimes (2008, 88), bringing in the importance of family networks and the position of females in the economy. In a follow-up article Martínez Franzoni and Voorend (2009) find that the likelihood of cross-class coalitions for the promotion of welfare provision varies by regime type.

⁵¹She distinguishes welfare regimes by their means of "risk prevention and risk coping coverage", finding four different categories (2011, 193)

 $^{{}^{52}}$ See also Gough and Wood (2004)

Rofman et al. (2008) is still a matter of constant adjustment. An important impact for the scope of the welfare state also follows from social assistance programs that are not related to employment, such as Conditional Cash Transfer (CCT) programs, which are however hard to measure on a cross-country basis (see Lindert et al., 2006; Handa and Davis, 2006; Fiszbein et al., 2009; Cecchini and Madariaga, 2011; Valencia Lomelí, 2008), despite efforts of systematic program evaluations of some countries like Mexico. CCTs such as Oportunidades in Mexico (starting 2001)⁵³, Bolsa Familia in Brazil (starting in the 1990's under a different name as a range of different social assistance programs until it was gathered under one major program), Familias in Acción in Colombia (launched in 2002) or Jefes y Jefas in Argentina are still in a nascent phase, starting in the late 1990's and, since the early 2000's, heavily expanded in Latin America and all over the world. They have been quite successful in terms of coverage so far and their output is much more progressive compared to conventional welfare programs (see Lindert et al., 2006). But Lindert et al. (2006) also point out that the size of the subsidy is still too small to be even close to an equivalent of welfare programs like social security. Nevertheless, it is so far not possible to include information on CCTs in cross-countries analysis.

Taking into account the obstacles of data coverage and identification difficulties, the chapters always pursue a dialog with qualitative evidence (e. g. single case studies such as in Segura-Ubiergo (2007); Huber and Stephens (2012, 2000) and broader attempts to categorize welfare regimes in Latin America (Rudra, 2008; Schneider and Soskice, 2009; Barrientos, 2009; Pribble, 2011)) and descriptive statistics that have been gathered by the World Bank, the Interamerican Development Bank (IDB) and the Economic Commission for Latin America (CEPAL) (see for example De Ferranti et al., 2004; Perry et al., 2007; Fiszbein et al., 2009; Cecchini and Madariaga, 2011; de la Torre et al., 2012). Hence, the mechanisms that are derived from theoretical reasoning and subsequently tested in regression frameworks do not stand squarely to the descriptive findings.

Finally, one could argue that such an endeavor to study social policy preferences in low- and middle-income democracies that suffer from fragmented labor markets and

 $^{^{53}}$ Oportunidades was the successor of the predecessor Progress which was launched in 1997 (for an overview see Fiszbein et al., 2009).

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weak state capacities, as undertaken in this dissertation, needs to wait until appropriate, high-quality data is made available. As much as there is some truth to this objection, it is questionable to demand that science always waits until the object of analysis neatly falls into the researchers hands. Nita Rudra (2008, 91), who studies welfare regimes in less developed states under the auspices of globalization, puts a very central concern into words: "the hazard is that policy-makers and citizens of [less developed countries] are likely to face the consequences of a vicious cycle involving insufficient data, the neglect of important research, and the persistence of weak, ineffective institutions". Hence, the usage of available data to answer complex questions on social policy in low- and middle-income democracies as done in this dissertation, showing at the same time its boundaries and the need for more fine-grained data for the loopholes that are identified, is also an attempt to work against this vicious cycle.

Overview

Chapter 1

The first chapter sets out to examine how the capacity of the state to extract revenue to finance the welfare state and its distributive capacities, that are needed to deliver social services, influence social policy preferences in low- and middle-income democracies compared to advanced industrial states. Starting from social policy preference research that focuses on high-income economies, I argue that the prerequisite of well-functioning institutions and a well-organized economy is not met in the developing-country context. In contrast, the institutional framework is fragile and inefficient, means of tax collection fall below expectations and a high informal economy repulse the idea that social policy preferences work according to the classical formula attained from studies of high-income democracies in political economy research. I argue therefore that the reliability that the state is capable to provide services as response for paid contributions is in doubt when the capacities of the state are weak. As consequence, only with increasing capacities of the state to fulfill the task of welfare provision will individuals turn towards the state to handle redistribution and the provision of benefits in times of need. Hierarchical modeling techniques are used to test the theoretical framework. The empirical analysis is based on World Values Survey data for a set of countries ranging from low- income to high-income democracies. The dependent variables are demand for state-led welfare provision and the preference for redistribution. As it is theoretically problematic to test the effect of an attitude on an attitude, which would be the case when we consider trust toward the state with regard to its effect on social policy preferences, it becomes even more important to factor in the institutional context individuals live in to unravel how the reliability of the state influences preference formation toward the welfare state.

The analysis confirms expectations; the better the distributive and extractive capacities of the state the higher the average individual's social policy preferences. Moreover, the effect is stronger for low- and middle-income democracies, supporting the theoretical rationale applied to this study, because the importance of the institutional framework for preference formation should decline the more reliable the state becomes. However, the study also advocates for the consideration of state capacity for welfare preferences in comparative studies of high-income democracies where we can also find variation in institutional strength. The first chapter therefore draws the attention to the importance to study social policy preferences from an institutional perspective, to link micro and macro level factors to a more encompassing theory of social policy preference formation.

Chapter 2

Esping-Andersen (1990, 21) already argued in his famous contribution that the "welfare state cannot be understood just in terms of the rights in grants. We must also take into account how state activities are interlocked with the market's and the family's role in social provision". Chapter 2 takes the former aspect, the role of the market in social provision under the analytical lens. As pointed out above, Latin American citizens experienced a wave of privatization during the 1990's so that we can expect individuals to be very alert to the question of how welfare goods should be provided: by the state or the market. Hence, the article studies individual preferences for the provision of social services as public or as club goods. I propose two competing hypotheses, the first named

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as "exclusion hypothesis" and the second referred to as "solidarity hypothesis". In the first hypothesis, I argue that a large informal sector as group of potential free-riders for public welfare goods, decreases preferences for the state as responsible entity for social services in order to exclude non-contributors. However, considering the volatility of the labor market and the likelihood to switch between formal and informal employment during one's life cycle, it is possible that a larger informal economy increases solidarity between the sectors, fueling preferences for the provision of welfare services as public goods to ensure benefit provision in times of informal employment in the future. The study looks at two particular social policies: health care and pensions. While health care reaches a more progressive outcome, pensions is still a rather regressive social policy in Latin American welfare systems, even though CCTs also provide care for the elderly based on means-tests. I disaggregate expectations of welfare provider preferences by income group. Cross-class alliances are expected between the middle-income and the high-income group, turning both toward preferring club good provision of social services, when the exclusion rationale is at work. A hierarchical model is applied to test the impact of the informal sector as context effect on welfare provider preferences of formal sector workers in particular and the Latin American society in general. The empirical analysis uses survey data from the LAB for 2008. The findings support the exclusion mechanism for health care provider preferences, the more progressive type of social services.

This chapter advocates for the adjustment of the level of analysis from the individual's income group to her labor market status (without neglecting the former). Risks, benefits, and burdens are unevenly distributed in a fragmented labor market where some individuals are exempt from employment-related social services, while benefiting from non-contributory services without participating in the formal system. In order to understand the input side of the welfare state – social policy preferences – in low- and middle-income democracies, we need to factor in the labor market status of the individual. When dysfunctionalities occur such as the hazard of free riders, individuals turn their back against the public system toward private providers of social services, supporting the general rationale that is developed in chapter 1 for the particular context of the Latin American public.

Chapter 3

As the Latin American labor market is fragmented into formal and informal employment, leading to a difference in risk allocation, chapter 3 addresses social policy preferences of formal and informal workers from a comparative perspective. Even though the Latin American welfare state is frequently labeled as 'truncated' (De Ferranti et al., 2004), providing more services to formal wage earners than to informal workers, the latter still have possibilities to benefit from the welfare state via social assistance programs and public welfare goods. Hence, we should observe a more intensive demand for state-led welfare provision and redistribution from informal wage earners for whom it does not come at a cost in contrast to formal workers. From a rational choice approach, I pose the hypothesis that informal workers are driven by economic self-interest based on a short-term horizon and that their welfare demands exceed those of formal wage earners because of lower costs. The applied rationale builds on the expectation that informal workers also perceive their own economic situation as more risk prone. I therefore test first in how far this expectation holds. I study formal and informal workers social policy preferences based on survey data from LAPOP for 2008 and 2010.

The empirical findings reveal however that informal wage earners cannot be identified as utility maximizing individuals motivated by a free-rider rationale. Informal workers are more likely to perceive their own economic situation as insecure compared to their formal counterparts. But preferences of informal workers are not higher despite greater exposure to risk so that they turn less toward the state than they should according to their status in the economy and their own risk perception. In contrast, social policy preferences of formal workers follow the Meltzer-Richard logic just as individuals in high-income democracies. The chapter challenges the assumption that informal workers exploit the weakness of the state by demanding higher welfare services without contributing to the sustainment of the welfare state via income taxation. Additionally, I apply theoretical contributions from the high-income country context to preference formation in low-and middle-income democracies, by adjusting them to the nature of the labor market in less developed democracies.

Chapter 4

The last chapter starts with a provocative claim: If the informal employment sector is a function of discontent with social policies, then informalization is endogenous to welfare policies so that the size of the informal sector can be interpreted as 'vote' against the public system. The findings of the previous chapter revealed that informal workers are at greater economic risk but at the same time, they do not have exaggerated welfare expectations. So the finding led to a the question: why is that so?

This chapter therefore evokes the idea that informalization is a function of social policy discontent, which could explain the lack of exaggerated preferences of this group of individuals that has means to profit from the welfare state without contributing to it. This assumption can, however, only hold for informal workers who have the capacities to choose between formal and informal labor market, - which I label as potential "exit seekers" - and are not 'doomed from the outset' because of lower bargaining power that follow low levels of education and a poorer family background. The study approaches social policy preferences from a different angle by taking the likelihood to enter the informal labor market as dependent variable. Drawing upon tax compliance literature that studies individual tax behavior from a rational actor assumption I apply its implications to the fragmented labor market of Latin American states. I argue in this chapter that individual attitudes induce a renunciation from the state toward the shadow economy. I hypothesize that dissatisfaction with the provision of public goods such as schooling and distrust of the government increases the likelihood to informalize. But also the context is considered as highly relevant for the likelihood to enter into informal employment structures. A weak state in terms of low institutional quality is proposed to raise the likelihood of informalization just as low social policy output in the form of social spending in general and more concrete assessments of the scope of social policy. The hypotheses are tested in a logistical hierarchical model based on public opinion data from the LAB for 2009 and 2010. The analytical focus is on individuals who have sufficient bargaining power to credibly choose between formal and informal labor market, defined by the level of education which threshold value is estimated with statistical procedures. I find support for the claim that informalization is a function of social policy discontent,

which is manifested through the effect of the attitudinal variables. Also, the better the institutional performance of the state the lower is the likelihood that individuals enter the informal labor market. The implication of the study regarding the research contribution of the overall dissertation is twofold. First, it shows that it is important to adjust the level of analysis to the structure of the labor market that is divided into formal and informal employment in Latin America. Informalization is to some extent an expression of social policy preferences in itself, however, mostly for individuals who have enough bargaining power to choose between the two labor market options. In this sense, the chapter therefore delivers an answer to the question that arose from the analysis of formal and informal workers' social policy preferences in chapter 3, why informal workers do not have an exaggerated demand for state-led welfare provision. Second, the analysis revealed that the institutional framework is of great importance for individuals to turn towards the state for welfare provision - or to turn their back against it as illustrated here - as emphasized in chapter 1. Individuals, who have the means to opt out, turn their back against the state when it lacks reliability of providing a return for paid contributions, by entering the informal labor market.

To sum up, the dissertation addresses social policy preference formation in the context of increased uncertainty that is reflected by weaknesses in the distributive and extractive capacities of the state and inefficiency – that is, the informal economy. Even though I address different context characteristics throughout the analyses (institutional framework, extractive capacity, informal sector) each one reflects a central part of the public goods game: generation of revenue to finance public goods, the capacity to deliver and the hazard of free-riders illustrated by the informal sector. The analyses reveal a considerable impact of these key features of the public goods game for social policy preferences in lowand middle-income democracies.

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Chapter 1

Social Policy Preferences from a Comparative Perspective

Abstract

Neither well-functioning institutions nor a well-organized economy can be taken for granted when studying social policy preferences in the Global South. On the contrary, in many low- and middle-income countries fiscal capacity is low, the informal sector is considerable, and the quality of institutions lacks far behind, so that reliable provision of public welfare goods is at question. The paper argues that a weak state discourages expectations of the public welfare system so that welfare demand rises only with growing institutional performance and compelling fiscal capacity. Using multilevel analysis of public opinion data for both low- and middle-income democracies and advanced industrial states, the article shows that the level of fiscal capacity and the quality of institutions is particularly relevant for individual welfare demand and preferences for redistribution in low- and middle-income democracies. Well-performing distributive and extractive capacities of the state raise social policy preferences. In contrast, institutional dysfunctionalities such as a rising informal sector and corruption exert a detrimental effect. The results reveal the need for explicit analysis of the characteristics of developing countries in order to understand social policy preferences in less affluent democracies.

Keywords: social policy preferences, institutions, fiscal capacity, developing countries

1.1 Introduction

Research on social policy preferences has come a long way in the last decade, providing insightful theories and evidence on the determining factors of welfare and redistributive preferences¹. However, studies that take into account particularities of low- and middle-

¹See Meltzer and Richard (1981); Piketty (1995); Svallfors (1997); Benabou and Ok (2001); Iversen and Soskice (2001); Moene and Wallerstein (2001); Corneo and Grüner (2002); Blekesaune and Quadagno (2003); Linos and West (2003); Mares (2005); Alesina and La Ferrara (2005); Scheve and Stasavage (2006);

income democracies are hard to find. Which factors drive welfare preferences when the stable background of high-income states dissolves?

A functioning state is in many cases a preliminary assumption of welfare research, which goes without mention. However, social policy is not only a central issue for affluent countries but also for the steadily evolving welfare systems in low and middle-income states (see Haggard and Kaufman, 2008). Theories on social policy preferences have to encompass characteristics of the developing world in order to explain welfare preferences in less affluent countries. Firstly, neither a well-functioning state nor a well-organized economy can be taken for granted. These factors critically undermine seminal theories on welfare preferences. A rather fragile democratic system might affect citizens' demand for publicly provided welfare by putting reliable redistribution of benefits at risk. As Rothstein et al. poignantly emphasize: "we need an explanation for why people trust the state to handle risk protection and/or redistribution"² (2011, 4). I argue in this article that the explanatory factor is the quality of institutions and the capacity of the state to provide and distribute social services.

Classical political economy theories advocate that individuals are driven by economic self-interest in their welfare demand (see Corneo and Grüner, 2002). However, empirical evidence of Dion and Birchfield (2010) dismisses the motive of monetary self-interest as sole driver when it comes to redistributive ideals, particularly for the low- and middleincome country context. Only in interaction with economic development and lower rates of income inequality does self-interest drive redistributive preferences. Hence, the developmental stage influences social policy preferences in the Global South. The recent contribution of Huber and Stephens (2012) prominently advocates for the importance of a democratic context for welfare state development, focusing on Latin America. Drawing upon (Mares, 2005), who shows that state capacity influences a state's level of social insurance, this article postulates that individual preferences for state-led welfare provision and redistribution are positively affected by the state's fiscal capacities and the institutional performance. I define fiscal capacity as a function of the enforcement of

Cusack et al. (2006); Larsen (2008); Bartels (2010); Finseraas (2009); Rehm (2009); Dion and Birchfield (2010); Gingrich and Ansell (2012); Rehm et al. (2012); Busemeyer et al. (2009); Busemeyer (2012).

²Original emphasis.

tax liability (cf. Besley and Persson, 2010). If the state performs well in collecting taxes, and if a functional institutional framework is in place, individuals favor governmental social protection as opposed to personal savings and individual care, as a more capable state is more likely to be a reliable provider of benefits. This demand might be diluted in the presence of a large informal sector, which increases the proportion of individuals who are able to free-ride on governmental resources that are provided as public goods and who reduce the public budget by withholding taxation. Also corruption should work negatively on social policy preferences in the developing world, as it contrasts fiscal capacity and the quality of institutions and exacerbates the collective action problem of public goods provision (see Scholz and Lubell, 1998; Rothstein et al., 2011).

Using pooled World Values Survey data from several time periods (wave IV-V)³ on low-, middle- and high-income democracies, I investigate in a multilevel framework how the contextual factors of fiscal capacity and the quality of institutions influence preferences for state-led welfare provision and redistribution in different developmental stages, also involving high-income democracies. Applying hierarchical modeling techniques, I show that fiscal capacity and the quality of institutions indeed affect social policy preferences. As expected, the varying intercept model reveals that fiscal capacity only matters for low- and middle-income democracies; it does not influence individual preferences in high-income societies of the global North. The quality of institutions, however, has a positive impact on redistributive preferences in both developed and developing countries. Redistributive preferences, which also attribute to the notion social justice, seem to be most sensitive to the institutional context.

The paper is structured as follows. Section 1.2 discusses the relevant literature on social policy preferences and the findings of the political economy literature on developing countries. In section 1.3 I elaborate the theoretical framework before I introduce method, data and the estimation model in section 1.4. Section 1.5 displays the results of the analysis, followed by further robustness checks in section 1.6. The paper concludes with

³The World Values Survey (2009) conducts surveys at irregular intervals (waves) with survey periods over several years. Wave IV (1999-2004) and wave V (2005-2008) are used in this study. The study of Dion and Birchfield (2010), which also studies developing countries among others, employs a much larger dataset by pooling an extensive number of surveys and survey years. I reject this approach as the wording of survey items differs across surveys which makes such a pooling strategy a questionable matter.

a discussion of the findings in the light of current and future research.

1.2 Social Policy Preferences and the Welfare State

The emerging literature on the welfare state in less affluent democracies agrees that theories and concepts of the classical welfare state literature struggle to travel well towards the Global South. The logic of 'compensation hypothesis' (Katzenstein, 1985) does not work in the developing world, where economic vulnerability constraints the ability of states to cushion shocks from the international market (Wibbels, 2006). Approaching the research field from a macro perspective, Segura-Ubiergo and Kaufman (2001) and Wibbels (2006) show that, particularly in Latin America, welfare expenditures are highly sensitive to trends in the global economy. In contrast to this, scholars argue that while globalization puts welfare systems under stress, years of democratic experience exert a positive impact on welfare expenditures (Brown and Hunter, 1999; Rudra, 2004; Avelino et al., 2005; Rudra and Haggard, 2005; Huber et al., 2008; Huber and Stephens, 2012).

While we learn from this literature that welfare budgets in developing countries are highly sensitive to the global economy and democratization, we need to be careful not to overestimate findings that are derived from a highly aggregated analysis. Macro-level analyses in many instances lack a micro-level theory which substantiates the macro-level relation (Kittel, 2006). They miss the actor through which social policy is channeled, as Cramer and Kaufman (2011) also observe. The analysis below aims at this research gap, linking macro-level factors to a micro-level theory of social policy preferences, following Mares and Carnes (2009) who advocate a more sensitive analysis of micro-level mechanisms in welfare state research on developing countries.

The study benefits from the rich body of literature on social policy and redistributive preferences that have been mostly addressed by empirical studies of Western democracies. Building on the classical work of Meltzer and Richard (1981) and their median voter theory, scholars have shown that redistributive preferences are a consequence of individual's income status (Finseraas, 2009) and insurance needs (Moene and Wallerstein, 2001), level of education and specificity of skills (Cusack et al., 2006), social mobility expectations

(Piketty, 1995; Benabou and Ok, 2001), uncertainty and the need to insure income loss when employed in a vulnerable economic sector (Mares, 2005), or ethnic and religious heterogeneity (Alesina and La Ferrara, 2005; Scheve and Stasavage, 2006). This paper shares with the literature the idea that individual-level factors explain much of the variance in social policy preferences. However, context characteristics of low-and middleincome democracies have so far been ignored in this branch of literature. Research on public policy preferences in low- and middle-income states, is just at the starting point. A first study in this research field by Cramer and Kaufman (2011) on attitudes toward fairness of wealth distribution in Latin America supports the need for greater attention to social policy preferences in low- and middle-income countries⁴. The authors show that attitudes to distributive justice are influenced by the context people live in. Following these findings and adopting an institutionalist approach, this study emphasizes that context affects attitudes. This process is however not just one-sided. The "policy feedback" literature prominently emphasizes that public policies affect attitudes (see Svallfors, 1997) which again feed back into the system via the responsiveness of political parties to public demand (see Kenworthy and McCall, 2008; Brooks and Manza, 2006, 2007). Endogeneity between welfare demand and the welfare system is a likely case. Political responsiveness is however slightly less given in low- and middle-income democracies, so that the danger of an endogeneity bias is lower in this context. Additionally, institutions change and prosper rather incrementally and thus, by studying a narrow time period I decrease the hazard of an endogeneity bias.

1.3 Theoretical Framework

1.3.1 Social Policy Preferences and Context

The welfare system contains a redistributive and an insurance character (Moene and Wallerstein, 2001). Ideally, it redistributes income from rich to poor and protects

 $^{^{4}}$ See also Gaviria (2007) for a study on redistributive preferences in Latin America and Dion and Birchfield (2010) who examine redistributive preferences in a large N setting with a development economics focus.

individuals from income loss in old age, unemployment, disability and sickness⁵. Welfare demand and redistributive preferences thus allude to different dimensions of the welfare state. The former referring to provision of benefits and insurance while the latter also attributes to an equality principle. Structural weaknesses in institutional capacity to provide welfare as it has been decided politically could severely restrict individual demand for state-led welfare provision and preferences on redistribution, due to a lack of reward for paid contributions.

Inspired by the work of Mares (2005) on social protection in high- and low-risk sectors, which finds state capacity and external insecurity have a strong effect on the level of social insurance, I argue that fiscal capacity and institutional quality enter people's utility function regarding welfare preferences. Mares brings to the forefront the idea that "in the presence of an 'inefficient' state, the high-risk sector might find state-administered social policies unattractive" (2005, 644). Efficiency of the state is defined as the state's ability to collect and to legally enforce social insurance contributions (Mares $2005)^6$. In order to capture the performance of the state I look at the state's fiscal capacity and institutional quality. Fiscal capacity focuses on extractive capacity whereas the concept of institutional quality adheres to the distributive capacity of the state. While Mares (2005) conducts the empirical analysis on the macro level, examining the extent of social insurance provided by the state in a cross-country analysis – that is, looking at the welfare output - I approach the argument at the micro level, examining the *input* side of the welfare state. Drawing upon Rothstein et al. (2011, 8), the welfare state represents a "mega-sized collective action problem", as individuals only contribute to the welfare system when they are confident that others do the same. From a rational choice perspective, individuals do not only consider their own action but also take into account other people's behavior, which makes them strategic actors. Free-riding of informal sector workers poses a danger to this "trust game" (Rothstein et al., 2011, 9).

⁵Unfortunately, the WVS survey data does not allow to empirically distinguish between redistributive and insurance preferences.

⁶In contrast to Mares (2005), I focus on fiscal capacity, operationalized by overall tax revenue and institutional performance instead of applying the concept of state capacity, measured by social insurance contributions. For reliable welfare provision, it needs more than just extractive capacity. Capacity to deliver social services need to be in place as well according to theoretical considerations applied here.

In countries where the shadow economy amounts to more than 40 per cent of GDP, such as Georgia, Guatemala, or Peru (Schneider et al. 2010), it is questionable that public policy preferences remain unaffected by the domestic structure of the labor market and obvious dysfunctionalities of public institutions, where a large group is able to benefit without contributing.

I pose the hypothesis that a weak state⁷ discourages demand for publicly provided welfare in two ways: first, as an ineffective state lacks the means to *collect* state revenue in terms of taxation, and, second, as such a state lags behind in *distributing* social benefits. Despite a need for financial support, individuals might then reject the state as the instrument of provision (given that provision is based on redistribution) when these two elements are ineffective. I define fiscal capacity as a state's strength in collecting tax: the *extractive* capacity of the state. State revenue is fundamental for a state to work, as institutional and social infrastructure needs to be financed collectively, and this is done by means of taxation. Efficient tax collection reflects, on the one hand, the structural enforcement power of the state (Lieberman, 2002) and, on the other hand, the amount of tax revenue available to finance social policies. Transfer policies and fiscal policies are hence two sides of the same coin. Increased taxation also means that individual's expectations of the state to provide rise. I focus on general tax revenue, which does not include social security contributions, as social security contributions are directly linked to social policy preferences by a mechanism of payment-and-reward⁸. Instead, fiscal capacity attributes to the states general strength of raising revenue. The capacity to collect taxes is therefore the first pillar on which the notion of a functional and capable state rests (cf. Besley and Persson, 2010).

⁷The notion of 'weak' is not meant to define a dichotomous category of weak and strong states, as the very intention of the analysis is to show that there is variation among so called weak states in terms of institutional and structural strength. Hence, the idiom is only used to distinguish between advanced industrial states and less developed democracies before moving to a closer analysis of variation within this latter group.

⁸Moreover, informal workers (who are also covered by the survey used in the analysis below) do not pay social security contributions, and would, thus, not be affected by fiscal capacity when the concept is operationalized with social security contributions.

8 Chapter 1 Social Policy Preferences from a Comparative Perspective

H 1 If fiscal capacity increases, it increases the individual's demand for governmental engagement on welfare provision and preferences for redistribution in low- and middle-income democracies.

The second pillar is categorized as institutional performance. Distributive capacities of the state are not less of importance, which are represented by the quality of institutions. Institutional performance in terms of lack of corruption, a functioning bureaucracy, balance of power, and the stability of the political system are likely to enter the individual's utility function when formulating social policy preferences. Rothstein et al. (2011) illustrate for the OECD context that in order for the working class to mobilize and push for a welfare system (which explains the development of the welfare state in the power-resource theory, see Huber and Stephens (2001)), well-functioning institutions need to be in place at first. The concept which they employ focuses on the "quality of the government" and not just on the quality of institutions as performed here. Their concept is more encompassing and poses higher data constraints, especially for low- and middle income democracies, which is why I choose a more narrow concept that relies on the quality of institutions⁹. The authors analyze the relationship between the quality of the government and social spending at the macro level, finding empirical evidence for a positive effect of governmental quality on welfare output. As Rothstein (2011) shows in a latter contribution with a field experiment, the quality of the government relates to individual perception of the state and general trust in society, which are factors needed, according to the author, to escape from the "low trust – high inequality – high corruption" equilibrium (2011, 154). A better government in terms of effective institutions is more likely to increase the country's economic performance (cf. Keefer and Knack, 1997; La Porta et al., 1999), which also opens up the chance for a more generous welfare system.

The proposed mechanism works through the individual's experiences with 'the state'.

⁹The authors construct a data set for the quality of the government based on expert surveys which does however not include enough low- and middle income democracies for the time period studied here to be applicable for this analysis. For a discussion on the utility of the Worldwide Governance Indicators (2012b, WGI) that is used to operationalize institutional performance, see Holmberg et al. (2009).

The state is of course not a unitary actor, but a much more vague entity to which individuals hold a general attitude as informational shortcut. Individuals assess the capacity of the state to generate revenue and to deliver welfare services through various experiences with the state in their everyday life, which occurs through many different channels. Meeting informal street-vendors on the street, making the experience to be asked for a bribe when applying for a service in the public administration or reading in the newspaper about fraud in the electoral process, induce the perception of a less reliable state. The cognitive process leads to an adjustment of incentives regarding welfare provision and redistribution for the individual. A state that is not capable to deliver services in return for paid contributions decreases the incentive for the individual to pay tax in order to finance public transfers and to ask for increased redistribution (which means a further tax increase, depending on income group). Thus, demand for welfare provision through the state should be lower when when the state lacks reliability.

The question still is – which type of institutions are needed to make welfare provision reliable? Rodrik (2000) looks at this question from an economic development enhancing principle. Institutions needed for a market to function are: "property rights; regulatory institutions; institutions for macroeconomic stabilization; institutions for social insurance; and institutions of conflict management" (Rodrik, 2000, 5). Rothstein (2011, 13), on the other hand, boils it down to a procedural definition, classifying the quality of the government by its degree of impartiality. I argue that the quality of institutions relates to both elements. A procedural definition is needed, which is not based on the outcome. But at the same time, certain institutions need to be in place for a market mechanism to work, as welfare provision is bound to the prerequisites of an iterated public goods game. Kaufmann et al. (2010) provide a comprehensive dataset with the prominent Worldwide Governance Indicators (WGI) that encompass these elements. They incorporate information on "rule of law", "voice and accountability", "political stability", "government effectiveness", "regulatory quality", and "control of corruption". A well-established legal system counteracts state capture by corrupt and rent-seeking officials, enforcing adherence to the rules of the game. Thus, the more entrenched the rule of law and regulatory quality, the less able are greedy elites to extract benefits

from the state and individuals to evade tax, increasing accountability and reliability of state performance (Keefer and Knack, 1997). All of these indicators capture a latent element which I define as institutional quality. Individuals do not form their attitude on the capacity of state just based on one particular experience with the state but based on a variety of experiences with public officials and public authorities, media coverage, and observations of functionalities and dysfunctionalities in people's everyday life. The sum of such experiences creates the perception of the state's distributive capacity in the mind of the individual. Under conditions of pervasive institutional weakness, ordinary citizens turn less toward the state to manage welfare provision and to handle the task of redistribution. Or, in turn:

H 2 If the quality of institutions increases, it increases the individuals' demand for governmental engagement on welfare provision and preferences for redistribution in low- and middle-income democracies.

Fiscal capacity and the quality of institutions as defined here are with not doubt interlinked. I consider both constructs as congruent factors. Fiscal capacity is also dependent on a well-functioning institutional framework. The proposed mechanism should mainly occur in states where fiscal capacity and institutional quality are still developing. It is unlikely that institutional quality heavily influences welfare demand in advanced industrial countries such as in Sweden or Denmark, where the institutional status quo is constantly at a very high level¹⁰. In high income democracies, reliable distribution of services, means of the state to levy tax or the danger of corruption are much less of an issue. It is even more likely to observe a reversed effect, meaning that high institutional quality and a very capable state decrease welfare demand because of a saturation effect¹¹. As Linos and West (2003) emphasize, and also Dion and Birchfield (2010) support this argument, there is cross national variation in the determining factors of social policy preferences. Some factors are more relevant for social policy preferences

¹⁰Countries such as Italy or Greece might be outliers.

¹¹A similar effect can be observed for social spending, GDP per capita or growth of GDP, which sometimes exert a negative effect on welfare demand (see Dion and Birchfield, 2010).

in some regions and not in others. Descriptive statistics of the survey data that is used below support this intuition (see Figures 1.1 and 1.2). Average welfare demand is lower in several high-income democracies despite high institutional performance. Fiscal capacity and average welfare demand is positively correlated with a value of $\rho_1 = 0.31$ (quality of institutions: $\rho_2 = 0.15$) for the low- and middle-income democracy sample. In contrast, the correlation between average welfare demand and fiscal capacity is $\rho_3 = -0.04$ and $\rho_4 = -0.67$ for institutional performance in high-income democracies¹². Thus, we can expect that there is a certain threshold effect of development at which point the quality of institutions and fiscal capacity is taken for granted, going hand in hand with a generous welfare state¹³.

Figure 1.1 The Quality of Institutions and Welfare Demand by Country



1.3.2 The Dysfunctional Equivalent: The Size of the Informal Sector and Corruption

The building blocks of the social safety net are tax payers and an effective state that manages welfare accounts and distributes benefits according to the rules of the game.

¹²Values are similar for preferences on redistribution and the independent variables. Only for institutional performance and redistributive preferences I receive $\rho_5 = 0.42$ for the high-income country sample.

¹³Differences are also a consequence of the countries' welfare regime (see Andreß and Heien, 2001; Arts and Gelissen, 2001; Blekesaune and Quadagno, 2003; Linos and West, 2003; Jæger, 2006; Larsen, 2008; Jordan, 2013)



Figure 1.2 The Quality of Institutions and Preferences for Redistribution by Country

Loayza and Rigolini (2011) underline the argument that the rule of law is inversely related to the informal sector, so that the informal sector is likely to rise with lower institutional performance and lacking fiscal strength, even though the relationship is more complex¹⁴. The size of the informal sector is negatively correlated to fiscal capacity and the quality of institutions but these factors are far from perfectly predicting each other. The size of the informal economy influences the amount of public revenue available for redistribution, rendering public engagement in welfare a very costly product (Hatipoglu and Ozbek, 2011). The larger the informal sector, the smaller the public budget which is based on tax revenue. Moreover, informal workers are able to free-ride on public welfare goods, extracting benefits without contributing. Informal-sector employment accordingly also depletes the pool of public welfare goods so that this fact is likely to influence individual preference of those who are not employed in the shadow economy in a negative sense.

Next to the size of the informal sector, low- and middle-income countries encounter the sticky phenomena of corruption and clientelism. Negative effects of corruption and

¹⁴Tax avoidance is a major though not the only reason for individuals to engage in the informal economy, as Portes and Sassen-Koob (1987) demonstrate. Perry et al. (2007) argue that informality encompasses huge heterogeneity among actors and their motives for entering the informal sector. Among these reasons are deliberate exclusion from benefits by ruling elites in certain sectors (state capture), costs of entry in terms of registration and bureaucracy (cf. Djankov et al., 2002) and labor market regulations. It is too simplistic, therefore, to define the informal sector as a direct consequence of low fiscal capacity and lacking institutional performance even though these factors are with no doubt interlinked.

clientelistic structures on economic development and the political system have been a strong focus of academic attention in the last decades. Seligson (2002) finds in a study on Latin American countries that corruption decreases trust in the legitimacy of the political system and also interpersonal trust. Trust is an essential factor for the public goods game, because it is based on iteration. It is a common insight that welfare provision encounters collective action problems. As Scholz and Lubell point out "citizens undertake some immediate costly effort like paying taxes, and face some risk that future collective benefits expected in return for compliance [...] may not materialize unless the government and other citizens maintain their side of the bargain" (1998, 400). If this trust is undermined by illegitimate behavior in terms of free-riding of informal sector workers or corrupt and clientelistic behavior of government officials, a downward spiral of noncompliance is the likely outcome of this public goods game. Therefore, the analysis below additionally tests the potential detrimental effect following from a large informal economy and corruption on social policy preferences.

1.4 Empirical Strategy

As the theoretical framework explicitly models country-level variables, I will apply a multilevel model instead of using fixed effects. With multilevel analysis it is possible to model the variation between groups, which is in this case the variation of certain macro-level factors between countries (Gelman and Hill, 2007; Steenbergen and Jones, 2002). Individuals are assumed to be nested in countries, which affects their social policy preferences; thus, a multilevel model accounts for the hierarchical nature of the model structure. The World Values Survey (WVS) serves as database. I pool survey waves IV and V, as they capture a large set of developing countries¹⁵. Multilevel modeling technique allows to pool the data despite varying group sizes. Data for the macro variables will be explained in the course of the following sections.

¹⁵Wave IV ran between 1999 and 2004 and wave V was collected from 2005 to 2008. I use a dummy variable to control for survey period. Countries drop out of the data set due to missing items in a number of surveys. Additionally, countries are excluded because of missing macro-level data.

1.4.1 Dependent Variables: Welfare Demand and Redistribution

I derive the dependent variable WELFARE DEMAND from the following WVS item (e037): "[t]he government should take more responsibility to ensure that everyone is provided for" vs "[p]eople should take more responsibility to provide for themselves", recoded on a scale from 10 (the former) to 1 (the latter)¹⁶. The dependent variable is conceptualized as preference in favor of state-led welfare provision: in short, WELFARE DEMAND. The meaning of the phrase is considered as sufficiently indicating "demand" for welfare expenditures by the notions of "government", "responsibility", and "provide". However, it should be recognized that the item omits to remind the respondent that increased welfare engagement by the state involves not only gains but also losses in terms of increased taxation¹⁷. The second dependent variable, REDISTRIBUTION is based on the survey item e035 asking the respondent on a scale from 1 if "[w]e need larger income differences as incentives for individual effort" to 10 if "[i]ncomes should be made more equal". Higher values reflect a preference in favor of redistribution.

The analysis rests on a linear hierarchical varying intercept model¹⁸. The dependent variable is treated as a continuous variable, ignoring the scaling boundaries of 1 and 10 of the measurement. This is a common approach, taking into account the complexity of a random intercept hierarchical model, and statistically unproblematic (cf. Gelman and Hill 2007, 123). In the robustness section, I also estimate the model as logistic hierarchical model in order to test if respondents cluster at certain extreme points of the

¹⁶The DV item is based on the "bipolar approach" used in survey design methodology (Groves et al. 2009, 249). The respondent has to choose between two alternatives, government responsibility versus individual responsibility, which reduces the measurement error that results from acquiescence. However, individual responsibility is not the opposite of government responsibility, so that the item might be biased by the respondent's preference for 'big government' versus lean states (in a neoliberal sense). In order to reduce this bias I control for the respondent's political ideology.

¹⁷The item refers to the status quo of welfare provision, which could be considered as an obstacle to compare welfare demand– as conceptualized here –, across countries. Ideally, one would use an item which is more abstract and not referring to the status quo. However, such an item does not exist in the WVS, which is a necessary data source due to the substantial interest in social policy preferences in low- and middle-income democracies – a topic with high data scarcity. Furthermore, even though the comparability of the item is a valid concern, I confine the argument to some degree with a technical fix by using social spending data to control for the status quo. From a theoretical aspect, I also refute the argument as welfare provision is generally rather low in low- and middle-income democracies so that the status quo varies less in these countries, which are the focus of the analysis.

¹⁸I chose this approach since interpretation of a hierarchical ordered probit model comes at the cost of high complexity without increasing informational gain compared to the linear model.

1 to 10 scale.

1.4.2 Independent Variables

Fiscal capacity and the Quality of Institutions

I operationalize fiscal capacity with tax revenue data (cf. Besley and Persson, 2010), since I want to measure the extractive capacity of the state. I use World Bank (WDI, 2012*a*) data on tax revenue as ratio of GDP as proxy for fiscal capacity¹⁹. Tax revenue does not include social security contributions, as contributions attribute to a mechanism of payment-and-reward. Although a more fine-grained operationalization of fiscal capacity would be an asset, data constraints for the developing world complicate the construction of a more complex and sensitive measurement of taxation²⁰.

The second variable of interest considers the distributive capacity of the state which I conceptualize as the quality of institutions. Measuring institutional performance is a delicate matter as comparable cross-country data for both developed and developing democracies are limited. I rely on the six indicators of the Worldwide Governance Indicators of the World Bank as it is the most comprehensive dataset in this regard. Next to the rule of law indicator, it includes a measure for "voice and accountability", "political stability", "government effectiveness", "regulatory quality", and "control of corruption" (see Kaufmann et al., 2010). All of these indicators measure central parts of institutional quality, as Keefer and Knack (1997) emphasized as well. However, since all indicators to a single scale which reflects the underlying latent structure which I call the QUALITY OF INSTITUTIONS.

Size of the Informal Sector and Corruption

Next to measuring institutional performance from a "functional" perspective, I add two

¹⁹Using tax revenue as share of GDP of the Government Finance Statistics (2012) of the IMF (central government) as robustness test to measure fiscal capacity also leads to a positive significant result for preferences on redistribution. Both measures are highly correlated.

²⁰Ivanyna and Von Haldenwang (2012) provide an overview of different measures for tax revenue and discuss obstacles and limitations for data on taxation for developing countries.

further variables of interest which measure the opposite of a well-functioning state: the size of the INFORMAL sector and the level of CORRUPTION. The impact of the size of the informal sector is proxied by a value for the informal economy. The World Bank recently published a study on "Shadow Economies all over the World" by Schneider et al. (2010) with data on the size of the informal economy (relative to GDP) for 162 countries between 1999 and 2007 based on a Multiple Indicators Multiple Causes (MIMIC) approach²¹. The measure takes values between 0 and 100, where 100 means that a country's entire GDP is based on informal economy. Corruption is operationalized with the corruption perception index (CPI) of Transparency International (TI). Values range from 1 (no corruption) to 10 (very severe corruption)²². All four independent variables are correlated, which increases multicollinearity and thus the hazard of misinterpretation of the actual variable impact²³ so that they are tested in separate models.

1.4.3 Controls

As controls on the micro level serve the variables AGE, AGE² (in order to control for nonlinearity effects of age), dummy variables for type of occupation (UNEMPLOYED, SELF EMPLOYED, PART TIME, RETIRED, HOUSEWIFE, and STUDENT; the reference category is EMPLOYED) and a dummy variable for religiosity (RELIGIOUS). EDUCATION is measured on a scale from 1, reflecting no education, to 5, indicating a university degree. I also employ a variable for party ideology (LEFT IDEOLOGY) in order to take account of the vast welfare state literature which explains the welfare state in terms of a class-based, powerresource theory (Huber and Stephens, 2001; Korpi and Palme, 2003; Huber and Stephens, 2012). Individuals who support left-wing parties are likely to favor increased governmental engagement with the public safety net. Finally, I add attitudinal variables which have

²¹It is a special form of structural equation modeling which takes informal economy as a latent variable and covariances of a number of observed variables to estimate the DV. Informal economy is a relative value, which is measured as a percentage of GDP (Schneider et al. 2010).

²²The CPI is recoded.

²³The correlation for the developing country sample for the main independent variables quality of institutions and FISCAL CAPACITY is $\rho_{fiscal_insti} = 0.54$. QUALITY OF INSTITUTIONS and CORRUPTION correlate with $\rho_{corr} = -0.87$, and with INFORMAL the value is $\rho_{inf} = -0.37$. The relationship between FISCAL CAPACITY and CORRUPTION is $\rho_{corr} = -0.50$, and with INFORMAL the value is $\rho_{inf} = -0.12$.

been depicted as influential factors for social policy preferences in the literature²⁴. I control for social TRUST to take into account the theoretical contribution of Rothstein and Uslaner (2005) who are claiming that general social trust is positively linked to the welfare state. Additionally, I add a variable for RISK AVERSION²⁵, because uncertainty increases the individual's preference for redistribution (see Rehm, 2009). I control for CHOICE as the variable encompasses the notion that an individual does not feel to have control over success in life (WVS, item a173; no control=1), reflecting an individuals mobility expectations (see Finseraas, 2009). If individuals expect to be rich in the future it decreases the individual's demand for higher redistribution (see Benabou and Ok, 2001).

Considering the well known median voter theorem (Meltzer and Richard, 1981) I also use a measure for income inequality, employing the GINI coefficient provided by Solt (2009)²⁶ on the macro level. Findings from the OECD context show that higher income inequality fuel redistributive preferences at the individual level (see Finseraas, 2009). The number of degrees of freedom for the hierarchical model is very limited so that macro controls are restricted to a minimum. Additional controls are included step by step (see Section 1.6) to test the sensitivity of the findings. For the robustness test I add a variable for growth of GDP (World Bank WDI)²⁷. Welfare demand might be affected by the country's economic development (see Alesina and La Ferrara, 2005). Lastly, I apply a proxy for the actual strength of the welfare state, because the existing scope of the welfare state affects people's preferences on social policy (see Andreß and Heien, 2001; Arts and Gelissen, 2001; Blekesaune and Quadagno, 2003; Linos and West, 2003;

²⁴It is questionable if it is valid to use attitude variables to explain other attitudes. Acknowledging this concern, I only use attitude variables as controls and not as explanatory variables. Considering the BIC value, the fit of the model increases when adding the attitude variables, which supports their use from a technical perspective, next to theoretical justifications explained above.

²⁵The categorical variable ranges from 1 indicating that the most important aspect when looking for a job is "[d]oing an important job that gives you a feeling of accomplishment " to 4 which signals that it is "good income so that you do not have any worries about money" (WVS, item c009). It is not an ideal measure for risk aversion, but only an approximation of security needs of the individual. Higher values reflect the individuals preference toward secure employment, and hence, a certain form of risk aversion.

²⁶The variable ranges from 0, indicating perfect income equality to 100, which would mean that all wealth belongs to only one person in the country.

 $^{^{27}{\}rm GDP}$ growth is used with a one-year lag with regard to survey year in order to take into account the fact that last year's GDP affects preferences more strongly than the current year's. GDP growth instead of GDP per capita is used as this variable is less correlated to social spending data.

Jæger, 2006; Larsen, 2008; Jordan, 2013). As proxy serves social spending data from the IMF (GFS) dataset. Table A (Appendix) shows descriptive statistics on the variables explained above.

1.4.4 Case Selection

I select only those countries within the WVS that are classified as democracies. The central difference in social policy preferences between authoritarian and democratic states is the evaluation of costs. When welfare is not based on tax revenue but derives from, for instance, oil rents, a different logic for welfare demand applies by definition. Only when the welfare state results from a democratic policy process, in which redistribution is part of fiscal policy, can we expect preference formation to be a function of a cost-benefit calculation as performed here. Understanding social policy preferences in authoritarian regimes would require a very different theory. Using Polity IV as an identification instrument to determine regime type, I follow the recommendations of Marshall et al. (2010), deeming only those countries democratic which score +6 or higher. Both, developing and advanced industrial nations will be included in the analysis using subsets²⁸. However, as discussed above, I assume that the institutional context only affects welfare demand in low- and middle-income countries²⁹.

But can we expect that the quality of institutions and fiscal capacity also exert the same effect across all *developing* regions? Due to different historical pathways to democracy and consequently, diverging experience with democratic institutions and democratic political system, it is also not unlikely that the independent variables do not have the expected impact across all *developing* regions (cf. Linos and West, 2003). To explore this relationship I correlate average welfare demand and the variables of interest

²⁸I categorize countries into the subsets "high-income country" and "low- and middle-income country" based on the development classification of the World Bank (Nielsen, 2011). Low- and middle-income countries: Albania, Bangladesh, Brazil, Bulgaria, Chile, Colombia, Czech Republic, Georgia, Ghana, Guatemala, India, Indonesia, Mali, Mexico, Moldova, Peru, Philippines, Trinidad and Tobago, Romania, South Africa, Turkey, Ukraine, Uruguay, Venezuela. High-income countries: Australia, Canada, Cyprus, Finland, Germany, Italy, Japan, South Korea, Norway, Poland, Slovenia, Spain, Sweden, Switzerland, United States.

²⁹Testing the impact of institutional performance and fiscal capacity on the entire sample, I receive highly significant positive coefficients for both variables on preferences for redistribution. Estimation results are available on request.

for each region separately.

QUALITY OF INSTITUTIONS and WELFARE DEMAND are positively correlated for Latin American and Caribbean countries ($\rho_{LAC} = 0.69$) and Asia ($\rho_{asia} = 0.65$). For the Eastern European country sample the correlation is negative with $\rho_{africa} = -0.07$ and also for the sample of African states ($\rho_{east} = -0.25$). The pattern slightly differs for REDISTRIBUTIVE preferences with $\rho_{LAC} = 0.71$ for Latin American and Caribbean countries, $\rho_{asia} = 0.36$ for Asia, $\rho_{africa} = 0.80$ for the sample of African states, and $\rho_{east} = 0.18$ for Eastern Europe. Context variables seem to be most influential for social policy preferences in Latin American and Asian democracies, alluding to the relevance of regional studies. As Larsen (2008) emphasizes, individual believes of deservingness regarding support and the tolerance of income inequality vary by country, which can be explained, to some extent, by the type of welfare policies. The following analysis considers only the *level* of welfare expenditures but not the *type* due to limited, comparable information on the type of social policies in less developed democracies. Also cultural explanations beg further exploration.

1.4.5 Model: Hierarchical Random-Intercept Model

The dependent variable is treated as a continuous variable, using a linear model. I apply a random-intercept model, allowing the intercept to vary between countries. The estimation model is defined as follows, where *i* denotes the individual level and *j* countries in which individuals are nested³⁰. The variable y_{ij} describes the outcome variable WELFARE DEMAND, or REDISTRIBUTION respectively, for i = 1, ..., n, and j = 1, ..., N, as defined in the previous section.

$$y_{ij} = \alpha_j + \beta_1 X_i + \epsilon_i \tag{1.1}$$

$$\alpha_j = \gamma_0 + \gamma_1 \mathbf{Z}_j + \gamma_3 U_j + \eta_j$$

 $^{^{30}}$ Equations 1 and 2 are formulated according to the notation used in Gelman and Hill (2007).

$$\eta_j \sim N(0, \sigma_\eta)$$

X is a vector of individual-level predictors, including micro variables as introduced above. The second equation presents the regression on the intercept α_j . U is a vector of state-level predictors. Z reflects the independent variables FISCAL CAPACITY and QUALITY OF INSTITUTIONS which are added one at a time due to multicollinearity issues. Because of the low number of degrees of freedom and the parameter intensive hierarchical model I use stepwise inclusion of further macro level variables in the robustness test. Survey weights are included at the micro level. All indicators are standardized by subtracting the mean and dividing the value by its standard deviation (Gelman and Hill, 2007), in order to compare coefficients in the magnitude of their effects.

I estimate the Null model in order to find out how much of the variance is explained by country level. To estimate the intra-class correlation (ICC) ρ I look at the ratio between group-level and individual-level variances, calculated by $\sigma_{\alpha}^2/(\sigma_{\alpha}^2 + \sigma_y^2)$ (Gelman and Hill, 2007). I receive a value of $\rho = 0.06$ for the model with WELFARE DEMAND as DV and $\rho = 0.099$ for REDISTRIBUTION, so that 6%, and respectively 10%, of the variance is explained by level 2, which is a fair amount, keeping in mind that preferences are largely driven by micro-level factors.

In a second step, I perform a logistic multilevel regression analysis in order to meet the needs of the data structure as discussed in section 1.4.1. The dependent variable is labeled as the probability of $y_{ij}=1$ for welfare demand and 0 signaling accordance with the statement that every individual should provided for herself (for i = 1, ..., n and j = 1, ..., N) and $y_{ij}=1$ for favoring redistribution respectively.

$$\Pr(y_{ij} = 1) = logit^{-1}(\alpha_j + \beta X_i) \tag{1.2}$$

$$\alpha_j \sim N(\gamma_0 + \gamma_1 \mathbf{Z}_j, \sigma_j^2)$$

Again, X is a vector of micro-level predictors including the same set of variables as in
the linear model above. Results from the logistical model are discussed in the robustness section 1.6.

1.5 Result

Fiscal capacity and the Quality of Institutions

Estimation results of the main model of interest containing only low- and middle-income democracies, are shown in Table 1.1. I find support for the first hypotheses H1 on the impact of FISCAL CAPACITY on welfare demand and preferences for redistribution (Model 1 and 3). A more functional state in terms of better fiscal capacity increases individual demand for welfare provided by the state. A unit increase of FISCAL CAPACITY augments WELFARE DEMAND by 0.6 standard deviations at the 10 percent level of significance and REDISTRIBUTIVE preferences by 1.04 standard deviations at the five percent level of significance. Compelling capacities of the state to extract revenue raises welfare demand. As predicted, fiscal capacity positively influences social policy preferences only in low and middle-income countries (see Table 1.2). The distributive capacities, mirrored by the QUALITY OF INSTITUTIONS mainly influence redistributive preferences, a one unit increase raises preferences for redistribution by 0.78 standard deviations in the developing country sample, supporting H2.

Table 1.1: Linear Hierarchical Varying-Intercept Regression: Developing Countries

	Welfare Demand	Welfare Demand	Redistribution	Redistribution
	(1)	(2)	(3)	(4)
Micro Predictors				
low income	0.324***	0.294***	0.295***	0.282***
	(0.091)	(0.077)	(0.086)	(0.077)
middle income	0.201***	0.163***	0.203***	0.178***
	(0.068)	(0.061)	(0.061)	(0.049)
female	0.013	0.038	0.057	0.052
	(0.034)	(0.031)	(0.046)	(0.041)
age	0.473**	0.370*	0.125	0.119
	(0.202)	(0.201)	(0.142)	(0.125)
age^2	-0.515**	-0.419**	-0.101	-0.125
-	(0.202)	(0.191)	(0.137)	(0.128)
married	-0.062*	-0.045	-0.036	-0.042

	(0.038)	(0.034)	(0.037)	(0.032)
religious	-0.029 (0.037)	-0.037 (0.035)	-0.129^{***} (0.050)	-0.121^{***} (0.041)
unemployed	0.069^{*} (0.040)	0.076^{**} (0.035)	$0.065 \\ (0.051)$	$0.054 \\ (0.047)$
retired	0.145^{***} (0.054)	0.150^{***} (0.045)	$\begin{array}{c} 0.111^{***} \\ (0.033) \end{array}$	0.108^{***} (0.032)
self employed	$0.023 \\ (0.035)$	$0.026 \\ (0.030)$	$\begin{array}{c} 0.035 \ (0.033) \end{array}$	$\begin{array}{c} 0.022 \\ (0.030) \end{array}$
part time employed	$0.022 \\ (0.031)$	$0.020 \\ (0.028)$	$0.014 \\ (0.043)$	$\begin{array}{c} 0.010 \\ (0.038) \end{array}$
housewife	0.086^{**} (0.043)	0.083^{**} (0.035)	0.067^{**} (0.030)	0.067^{**} (0.031)
student	-0.020 (0.063)	-0.024 (0.057)	$0.027 \\ (0.031)$	$0.027 \\ (0.028)$
left ideology	0.229^{***} (0.058)	0.201^{***} (0.051)	0.218^{***} (0.064)	0.200^{***} (0.055)
education	-0.142^{***} (0.029)	-0.127^{***} (0.028)	-0.197^{***} (0.046)	-0.232^{***} (0.043)
choice	0.135^{***} (0.051)	0.127^{***} (0.045)	0.181^{***} (0.043)	0.181^{***} (0.040)
social trust	$0.016 \\ (0.051)$	$0.002 \\ (0.047)$	0.189^{***} (0.048)	0.163^{***} (0.043)
risk aversion	0.189^{***} (0.073)	0.178^{***} (0.061)	$\begin{array}{c} 0.113^{***} \\ (0.031) \end{array}$	$\begin{array}{c} 0.112^{***} \\ (0.025) \end{array}$
Macro Predictors				
waveIV	$0.607 \\ (0.372)$	$0.238 \\ (0.186)$	0.715^{**} (0.298)	0.355^{**} (0.165)
GINI	$0.137 \\ (0.293)$	$0.117 \\ (0.295)$	-0.103 (0.279)	-0.092 (0.278)
fiscal capacity	0.600^{*} (0.345)		1.038^{**} (0.460)	
quality of institutions		-0.147 (0.324)		0.783^{**} (0.334)
cons	6.049^{***} (0.178)	6.017^{***} (0.229)	4.736^{***} (0.241)	5.151^{***} (0.290)
Random Effects Para	meters			
Var (constant)	0.567 (0.182)	0.754 (0.273)	1.342 (0.453)	$0.735 \\ (0.142) \\ 0.257$
Var (residual)	11.369 (0.493)	11.525 (0.480)	9.096 (0.520)	9.257 (0.492)
N Level 1	19792	23529	19646	23347
N Level 2 BIC	23 96273.3	27 116314.7	$23 \\ 91558.0$	27 110644.3
	(1 0			

Standard errors in parentheses; Survey weights included; * p < 0.10, ** p < 0.05, *** p < 0.01Source: WVS: Wave IV, V; WB WGI; WB WDI; Solt 2009.

Redistributive preferences might be more sensitive to the institutional context than mere welfare demand, as redistribution attributes to the creation of winners and losers and a certain notion of distributive justice. The quality of institutions is more relevant to fulfill such a task than for the "simple" provision of benefits, as reflected in welfare demand. This latter findings also holds for the high-income country sample displayed in Table 1.2 Model 9, contradicting the regional relevance of institutional performance expressed in hypothesis 2 to some extent, but revealing first empirical evidence for the micro mechanism behind Rothstein et al. (2011)'s argument. The justice aspect seems to be independent of the level of welfare provision and the overall economic development so that it also matters in the advanced industrial nations. The second hypothesis therefore needs to be revised; institutional performance raises redistributive preferences in both developing and developed democracies.

	Welfare Demand	Welfare Demand	Redistribution	Redistribution
	(5)	(6)	(7)	(8)
GINI	1.827	2.123***	0.823	-0.336
-	(1.133)	(0.594)	(0.834)	(0.362)
fiscal capacity	-0.397		0.427	
1 0	(0.494)		(0.352)	
quality of		-0.511		0.821***
institutions		(0.524)		(0.176)
cons	7.477***	8.272***	6.150***	4.245***
	(0.967)	(0.927)	(0.718)	(0.347)
Random Effec	ts Parameters		· · ·	`
Var (constant)	1.350	1.281	0.870	0.441
	(0.707)	(0.430)	(0.554)	(0.192)
Var (residual)	7.245	7.267	6.365	6.327
````	(0.331)	(0.326)	(0.271)	(0.273)
N Level 1	13767	14240	13685	14139
N Level 2	18	18	18	18
BIC	63441.4	65805.0	61430.4	63468.1

 Table 1.2: High Income Country Sample

Standard errors in parentheses; Survey weights included;

* p < 0.10,** p < 0.05,**<br/>** p < 0.01

Source: WVS: Wave IV, V; WB WGI; WB WDI; Solt 2009.

Note: Models include all variables as in Table 1. For presentation purposes only variables of interest are displayed.

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The coefficient for income inequality is however not significant. That income inequality fails to increase welfare output in developing countries, particularly in Latin American countries, despite the median voter theorem, is not a new finding (Segura-Ubiergo and Kaufman, 2001). But that income inequality also fails to enter people's preference formation in the context of severe inequality is rather surprising³¹. Different specifications of the measurement of income inequality might be needed as performed in Dion and Birchfield (2010) and Lupu and Pontusson (2011).

At the micro level I find several effects that are consistent with preference theory on redistribution and social policy. In line with findings from the OECD world, income is a strong driver for welfare preferences (M 1-4). As low-income individuals are at higher risk of falling into the social safety net, this outcome is very intuitive. The results for the negative impact of education are also consistent with findings in the literature (cf. Finseraas, 2009), as higher education entails higher earning power (Häusermann and Schwander, 2010). The unemployed are more likely to favor state-led welfare provision, again a very intuitive result given their need for insurance, just as the retired and housewives are more likely to demand more governmental engagement in welfare and redistribution. A left-wing ideology is also a strong driver for welfare preferences and redistribution. A left-wing ideology fosters welfare demand, supporting the potential relevance of power-resource approaches (Huber and Stephens, 2001) in explaining welfare policy in developing countries. Regarding the attitudinal variables, risk aversion, trust and the lack of control of one's own life (CHOICE), they increase welfare demand and redistributive preferences, in line with findings from the OECD context (on risk aversion and mobility expectations, cf. Benabou and Ok, 2001; Piketty, 1995). Trust increases preferences for redistribution also in low- and middle-income democracies just as Rothstein and Uslaner (2005) predict for the high-income country context.

## Corruption and Informality

When all other predictors are at their mean value, the size of the informal sector has a

³¹This result partly supports Cramer and Kaufman (2011) ambiguous observations that the poor's dissatisfaction with income distribution in Latin America does not increase as income inequality grows, even though the authors do find an impact of inequality for the middle class.

negative effect on welfare demand at the 5 percent level of significance. A one percentage increase in the size of the informal economy decreases redistributive preferences by 0.6 standard deviations (M 11, Table 1.3). The average individual seems to be sensitive to the detrimental forces following from a large group of free-riders in regard to the consequences for the public goods game. But informality does not significantly influence welfare demand, which might be explained by the fact that a larger informal sector also means that there is a larger share of individuals who favor increased welfare provision as it does not come at a cost for them. Further research on this mechanism with more sensitive data is needed.

	Welfare Demand	Welfare Demand	Redistribution	Redistribution
	(9)	(10)	(11)	(12)
GINI	0.091	-0.078	0.127	-0.182
	(0.282)	(0.206)	(0.257)	(0.292)
informal	0.036		-0.603**	
	(0.270)		(0.284)	
corruption		-0.511**		-0.791
Ĩ		(0.243)		(0.515)
cons	6.079***	6.449***	5.004***	5.193***
	(0.147)	(0.199)	(0.228)	(0.392)
Random Effec	ets Parameters			
Var (constant)	0.729	0.632	0.801	0.761
	(0.209)	(0.183)	(0.225)	(0.126)
Var (residual)	11.595	11.525	9.293	9.255
	(0.484)	(0.480)	(0.501)	(0.493)
N Level 1	23010	23529	22831	23347
N Level 2	26	27	26	27
BIC	113696.4	116310.0	108113.9	110640.5

Table 1.3: Detrimental Effects: Corruption and Informality

Standard errors in parentheses; Survey weights included;

* p < 0.10, ** p < 0.05, *** p < 0.01

Source: WVS: Wave IV, V; Solt 2009; Scheider et al. 2010; CPI Transparency International; Note: Models include all variables as in Table 1. For presentation purposes only variables of interest are displayed.

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Corruption decreases welfare demand as expected. However, it is surprising that we do not find a negative impact on redistributive preferences. Among the detrimental factors, identified as corruption and the informal sector, both factors exert a negative effect on social policy preferences, supporting theoretical expectations. The models which include a variable for corruption have a marginally better model fit. The fit of the models can be compared by looking at the size of the BIC values. Lower values signal a better model fit. Models including FISCAL CAPACITY have the smallest BIC values, signaling most explanatory capacity (Table 1.1).

# 1.6 Robustness Tests

# 1.6.1 Stepwise Inclusion

Because of the low number of observations at level two, the number of additional parameters is limited. Testing the reliability of the findings I add a further control for growth of GDP (Word Bank, WDI) and social spending from the IMF GFS (SOCIAL PROTECTION). Because of limited data on social security expenditures for several countries, the number of observations is reduced, which is particularly problematic for the degrees of freedom at level two. Results are displayed in Table 1.4.

	Welfare Demand	Welfare Demand	Redistribution	Redistribution
	(13)	(14)	(15)	(16)
waveIV	0.505	0.211	-0.855	-0.484*
	(0.338)	(0.192)	(0.531)	(0.265)
GINI	0.490	-0.0120	0.672	-0.0544
	(0.328)	(0.477)	(0.526)	(0.494)
social protection	0.951	3.115	-1.460	0.226
	(2.305)	(2.051)	(2.007)	(1.531)
GDP growth	0.173	0.146	-0.256***	-0.284***
2	(0.114)	(0.166)	(0.089)	(0.085)

Table 1.4: Linear Hierarchical Varying-Intercept Regression:Developing Countries

fiscal capacity	0.571*		0.0327	
	(0.341)		(0.561)	
quality of		$0.637^{*}$		1.077***
institutions		(0.363)		(0.323)
cons	6.372***	7.058***	5.153***	5.912***
	(0.456)	(0.412)	(0.441)	(0.233)
Random Effects	Parameters			
Var (constant)	0.466	0.596	0.960	0.574
	(0.151)	(0.175)	(0.271)	(0.163)
Var (residual)	10.441	10.954	8.089	8.535
	(0.729)	(0.739)	(0.623)	(0.620)
N Level 1	8503	9840	8421	9732
N Level 2	14	16	14	16
BIC	43978.3	51425.0	41430.5	48447.6

Standard errors in parentheses; Survey weights included;

* p < 0.10, ** p < 0.05, *** p < 0.01

Source: WVS: Wave IV, V; IMF GFS, WB WGI; WB WDI; Solt 2009.

Note: Models include all variables as in Table 1. For presentation purposes only variables of interest are displayed.

The findings on the impact following from fiscal capacity and institutional performance remain robust in Models 13 and 16, Table 1.4. The coefficient for QUALITY OF INSTITUTIONS on WELFARE DEMAND becomes significant, while the effect following from FISCAL CAPACITY on REDISTRIBUTIVE preferences is not significant anymore. Differences in the number of observations might explain the deviance. The BIC heavily drops in Models 13 - 16 but this is also a consequence of the harsh reduction of observations. BIC values for models with different sizes of N need be compared with caution as the value is sensitive to the number of observations. The most robust findings are consequently the positive impact following from FISCAL CAPACITY on WELFARE DEMAND and the positive effect resulting from the QUALITY OF INSTITUTIONS on REDISTRIBUTIVE preferences.

# 1.6.2 Logistic Hierarchical Model

Finally, I employ a sensitivity test which aims at the structure of the dependent variables WELFARE DEMAND and REDISTRIBUTION. I check if respondents cluster at extreme points by using a logistic hierarchical model. A large number of respondents does so on the values 5 and 6, which suggests a measurement effect due to the design of the items. In order to express indifference between the two attitudes (1-10), respondents choose either 5 or 6. Dichotomizing the items is biased by those respondents who arbitrarily answered 5 and 6 to express indifference. Following the statistical strategy of Gelman and Park (2009), I therefore exclude categories 5 and 6 from the variable and dichotomize categories³² 1-4 as 0 and 7-10 as 1. The estimation model was introduced in section 1.4.5. I report results as logistic coefficients (Table 1.5).

	veloping countries			
	Welfare Demand	Welfare Demand	Redistribution	Redistribution
	(17)	(18)	(19)	(20)
fiscal capacity	$0.351^{***}$ (0.126)		$0.599^{***}$ (0.201)	
	(0.220)		(0.202)	
quality of		0.008		$0.512^{**}$
institutions		(0.181)		(0.212)
cons	0.301***	0.334**	-0.744***	-0.457**
	(0.102)	(0.152)	(0.173)	(0.186)
Random Effe	cts Parameters			
Var (constant)	0.220	0.270	0.658	0.455
	(0.074)	(0.085)	(0.210)	(0.127)
N Level 1	19792	23529	16676	19769
N Level 2	23	27	23	27
BIC	25915.6	30756.6	19895.8	23685.9

Table 1.5: Logistic Hierarchical Random-Intercept Regression:Developing Countries

Standard errors in parentheses; Survey weights included;

* p < 0.10, ** p < 0.05, *** p < 0.01

Source: WVS: Wave IV, V; WB WGI; WB WDI; Solt 2009.

Note: Models include all variables as in Table 1. For presentation purposes only variables of interest are displayed.

The results in Table 1.5 support the findings from the linear model. A unit increase in FISCAL CAPACITY increases the probability of greater demand for public welfare by 0.35 standard deviations and for preferences for redistribution by 0.6 standard deviations at the one percent level of significance. QUALITY OF INSTITUTIONS is also positive and significant at the five percent level of significance, but again only for redistributive

 $^{^{32}}$  Dichotomizing the DVs on the full 1-10 scale without excluding the answer categories 5 and 6 does not change the outcome to any relevant extent.

preferences (M 20). Findings on the impact of FISCAL CAPACITY and QUALITY OF INSTITUTIONS remain robust in the logistic hierarchical model.

# 1.7 Conclusion

Triggered by Mares (2005) work on the influence of state capacity on social insurance preferences, and Rothstein et al. (2011) contribution about the quality of the government and the welfare state, the research question addressed in this article asked how individuals think about public welfare when the stable background of high-income economies dissolves. I have shown that welfare preferences in low- and middle-income democracies are influenced by the level of fiscal capacity and institutional performance. In line with recent research of Huber and Stephens (2012), the analysis reveals that democratic ideals work positively on welfare demand. However, instead of looking at the impact of the indistinct notion of democracy, I have studied concrete expressions of democracy that is the distributive capacity of the state – needed to reliably distribute welfare services – and the capacity of the state to extract revenue. A state which is built on a stable legal framework, forcing citizens and elites to adhere to democratic standards, and which is at the same time capable of levying tax in order to sustain public budgets, increases welfare demand and redistributive preferences at the individual level. While fiscal capacity does not enter welfare demand in affluent democracies, it is a decisive issue in low- and middle-income democracies, where a weak state calls reliability of welfare provision into question. The quality of institutions has a positive influence on redistributive preferences in both developed and developing democracies.

The study confirms several arguments from classical political economy approaches, such as the micro-level effects of income, education, age, ideology, employment status, risk aversion and trust. The study however advocates for a more fine-grained analysis of regional characteristics and, hence, further research with a regional focus. Based on empirical investigations fiscal capacity and institutional quality seem to explain social policy preferences in some regions to a lesser degree than in others. From the perspective of a broader research agenda, a better understanding of the formation of

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welfare preferences that takes into account characteristics of the developing world such as institutional strength, capacities of the state to raise revenue, corruption and the size of the informal sector is essential to explain not only the input side of the welfare state but also – in the long run – welfare output in the Global South.

# 1.8 Appendix

Table A Descriptive Statistics	of Individual and	Country Level Data
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Variable	Observations	Mean	Std. Dev.	Min	Max
Dependent Variables					
welfare demand	44720	6.095	3.366	1	10
redistribution	43764	5.199	3.115	1	10
Independent Variables					
fiscal capacity	37405	17.921	7.222	7.700	47.710
quality of institutions	43911	0	2.342	-3.666	4.310
Micro Variables					
female	44720	0.490	0.500	0	1
age	44720	41.741	16.129	15	99
$age^2$	44720	2002.392	1502.106	225	9801
married	44720	0.647	0.478	0	1
religious	44720	0.708	0.455	0	1
low income	44720	0.357	0.479	0	1
middle income	44720	0.506	0.500	0	1
unemployed	44720	0.102	0.303	0	1
retired	44720	0.133	0.340	0	1
self employed	44720	0.117	0.321	0	1
part time employed	44720	0.083	0.276	0	1
housewife	44720	0.136	0.343	0	1
student	44720	0.073	0.260	0	1
education	44720	3.069	1.136	1	5
left ideology	44720	0.173	0.378	0	1
choice	44720	3.823	2.362	1	10
trust	43708	0.257	0.437	0	1
risk aversion	39454	2.758	1.122	1	4
Macro Variables					
informal	44143	28.421	12.502	8.1	62.1
corruption	44720	4.913	2.250	0.400	8.8
GINI	44720	39.905	11.116	23.328	67.756
social protection	24212	277753	1496130	10.639	10700000
gdp growth	43430	4.592	2.575	-5.970	12.344
wave IV	44720	0.379	0.485	0	1

Source: WVS (IV-V); World Bank World Development Indicator, Worldwide Governance Indicators; Schneider et al. (2010), Solt (2009); IMF GFS (social protection).

# Chapter 2

# Public versus Private Welfare Provision

# Abstract

This article examines how the informal sector, as a group of potential free riders for public welfare goods, relates to individual social policy preferences in low- and middle-income countries. The *exclusion hypothesis* proposes that a large informal sector lowers the preferences from the formally employed, middle- and high-income groups for social services to be provided by the state, and raises these groups' preferences for public welfare goods to become club goods. In contrast, the *solidarity hypothesis* argues that the middle-income group allies itself to the informal sector to insure against the risk of future employment in informality. The study examines individual preferences for the provision of pensions and health care by either the state or private enterprises. The two competing hypotheses are tested with a hierarchical model using survey data from Latin America. The findings offer support for the exclusion hypothesis.

*Keywords*: social policy, self-employment, preferences, income, Latin America, rational choice

*JEL classification*: O170 Formal and Informal Sector, H4 Publicly Provided Goods, O54 Latin America, Caribbean

# 2.1 Introduction

The research field on private versus public provision of welfare services is a highly debated one, especially with regard to the welfare systems of low- and middle-income economies¹.

¹Scholarly work focused on the analysis of the utility of privatization, mainly in the field of economics (see Boycko et al., 1996), while others studied its distributive aspects (Murillo, 2002; Madrid, 2003; Brooks, 2007). In contrast to standard approaches on social policy privatization, this study aims at the analysis of the demand side of welfare policies.

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While public welfare provision encompasses a redistributive rationale, privatization allocates provision of social services to the market, which follows a supply and demand logic. Hence, preferring privatization of social benefits goes in line with turning one's back on social solidarity. This article examines individual preferences for public versus private provision of social services in Latin America (LA hereafter) by testing two competing explanations, subsequently referred to as the exclusion and solidarity hypotheses. The question is asked whether formal wage earners form welfare preferences based on a cost-benefit calculation and thus favor an exclusion of free riders – represented by the informal sector – or whether the decisive cleavage evolves instead around motives of solidarity for a group of individuals to which formal workers can also easily belong. Both the logic of exclusion and solidarity are further disaggregated into preferences by different income groups.

When we consider Rueda's (2005; 2006) concept of labor-market insiders and outsiders, which is derived from the composition of labor in industrialized societies, low- and middleincome countries are marked by a similar stratification within the labor market: formal and informal employment. Rueda (2006) emphasizes that welfare preferences vary between insiders and outsiders because their costs and gains differ. This thought is likely to hold for formal and informal wage earners as well. The informal sector is characterized by unregistered employment, tax avoidance, unofficial production of goods and services, and a high degree of heterogeneity. Informal workers do not contribute to the public revenue or to the welfare system via direct taxation, which is one of the most salient forms of taxation, so that informal workers resemble the idea of 'outsiders' to the public system. In contrast to this, formally employed workers, the 'insiders', carry the tax burden and contribute to the welfare system by payroll tax. With regard to public welfare goods such as education, housing, basic welfare aid, health-care subsidies, or universalistic pension schemes, informal sector workers might be able to free ride on these goods². Consequently, the costs of the public welfare system are tremendously higher for formal

²Free-riding is not meant in the pure Olsonian sense here, as this would imply that informal workers deliberately choose informality in order to profit from public welfare goods. However, the reasons for informalization are manifold, so that free-riding, as used in this article, merely refers to the option to profit from a good without contributing to it.

sector workers, in particular those of the middle-and high-income group, and also for the general society as such, compared with the costs for the informally employed. More precisely, from a cost-benefit perspective, I argue that the larger the share is of the informally employed in the working population, the stronger the incentives will be for formally employed middle- and high-income workers to favor a private welfare provider – and thus to turn public welfare goods into club goods – which excludes free riders much more efficiently than does the state. This assumption will be referred to as the *exclusion hypothesis*.

As a competing theoretical claim, I contest this logic using the *solidarity hypothesis*, which argues that formal workers ally with the informal sector because the distance between informal and formal employment is marginal and because, in the long run, formal workers may also end up themselves in the informal sector due to the instability of formal work. The argument draws upon on the theoretical contributions of Moene and Wallerstein (2001), who emphasize that insurance demand mediates the redistributive preferences that arise from income distribution in society, Piketty (1995), who accentuates the relevance of social mobility expectations, and Lupu and Pontusson (2011), who allude to the role of social affinity in this context. Solidarity is understood here as a rational choice to maximize profit by maximizing the status of one's own group or a group that one can belong to in the near future. If the demand for insurance – including the future demand for it – is more salient than the fear of free riders, then the size of the informal sector should show a positive conditional impact on middle-income earners among the formally employed. Which rationale is at work will be scrutinized based on preferences for the provision of pensions and health care – social policies with different degrees of progressivity and regressivity in terms of redistribution.

I chose Latin America as the region for my analysis as the continent has a long history with welfare systems (Mesa-Lago, 1990; Haggard and Kaufman, 2008) and because of the widespread adoption of privatization and welfare state reforms in past decades. Latin American citizens have therefore experienced sharp changes in social policies and are consequently more likely to have developed opinions on the issue of private versus public welfare³. Furthermore, informal employment plays a prominent role in the structure of the labor market in all Latin American countries. I use a logistic hierarchical analysis that allows me to model country-level indicators as well as micro-level factors, using survey data from the Latinobarómetro (LAB) for 2008. I start with a varying-intercept model on the subset of formal wage earners and then I employ the estimation model on the full sample to test the robustness of the argumentation in a broader theoretical context. I find robust evidence that, as the informal sector grows, the likelihood to prefer public welfare provision of health care over private provision decreases on average. As the applied cost-benefit logic proposes, on average formal wage earners tend to prefer private welfare provision of health care conditional on a growing informal sector. The middle-income group tends to ally with the informal sector with respect to pension preferences, favoring public provision over private conditional on a growing informal sector. However, because of the regressivity of social security in Latin America, assuming solidarity here might be a fallacy. The explanatory power of income group with respect to welfare-provider preferences is generally rather humble compared to the impact resulting from left ideology and satisfaction with privatization.

The remainder is structured as follows. Section 2.2 presents a micro-level framework for social policy preferences that takes into consideration the provider preferences of different income groups and the size of the informal sector as a context effect. The competing hypotheses of exclusion and solidarity are introduced. Descriptive statistics are discussed in section 2.3. Subsequently, section 2.4 presents the estimation model and data before section 2.5 examines the results and robustness tests. Section 2.6 concludes.

# 2.2 Theoretical Framework: Social Policy Preferences in a Stratified Labor Market

The labor market of low- and middle-income democracies can hardly be treated as a homogeneous entity nor can social policy preferences be considered a function of unitary interests. Rueda (2005, 61) fueled the debate on policy preference research by

 $^{^{3}}$ For a similar thought see Carnes and Mares (2013).

introducing the concept of insiders and outsiders within the labor markets of industrialized democracies by analyzing party strategies based on the interests of "secure employment (insiders)" and "those without (outsiders)," respectively⁴. In contrast to the labor markets of Western democracies, we can observe a different type of insider and outsider in developing countries. Here the structural divide revolves around formal and informal employment. Ideally, we would define those workers as informal wage earners who are "not recognized or protected under the legal and regulatory framework" and who are facing "a high degree of vulnerability" with regard to job security, representation, or property rights (ILO, 2002, 3). Rueda (2005, 2006) illustrates the need to take into account structural differences of the labor market when studying welfare systems and public policy preferences as political parties vary in their response to the needs of these distinguishable groups. Hence, the question is if informal and formal workers occupy a similar position in the political economy of low- and middle-income countries.

#### 2.2.1 The Informal Sector

Why do we care about the informal sector? Firstly, it is generally misleading to refer to the informal sector. Informal sector employment involves deliberate and voluntary choice to enter into informal structures, on the one hand, and involuntary entrapment in the shadow economy, on the other. A large share of workers are simply trapped in informality, belonging to the low-income group (Portes and Sassen-Koob, 1987) and working, for example, as street vendors, construction laborers, or family workers. However, informalization also occurs among high-income earners where the motives mainly evolve around tax evasion. As Roberts (2002, 22) emphasizes, "many informal workers occupy an ambiguous class position, participating in diversified economic activities that combine wage labor with petty entrepreneurship". Informality therefore encompasses a large range of income levels and represents an extremely heterogeneous group.

Secondly, entering the informal sector does not appear as a straightforward function of certain criteria, but as a much more complex and even multi-causal decision in some cases. Factors that lead to informalization include the degree of regulations, which

⁴The insider/outsider theory initially goes back to the influential work of Lindbeck and Snower (1986).

pose an obstacle to enter the formal market, tax evasion, preferences for autonomy and flexibility, fairness of tax law, surplus of labor, the degree of industrialization, and survival, which mostly occurs in developing countries (see Gerxhani, 2004). Lower state capacity facilitates informalization (see Loavza and Rigolini, 2011, on the function of rule of law in this context), which can lead to a vicious circle of informalization and deteriorating institutional and structural strength (see e. g. Saavedra and Tommasi, 2007), but the relationship is much more complex and multidimensional as research on informalization has shown (Djankov et al., 2002). Due to the dominant size of the informal sector in Latin American societies and the relevance of this phenomenon in terms of economic development (see De Soto, 1989; Schneider and Karcher, 2010), it is important to understand the twofold impact of the informal sector. For one, this socio-demographic group presents a valuable source of political support for parties and incumbents (see Thornton, 2000). For another, they affect public revenue by evading taxes, which in turn influences the size of the public budget and, consequently, affects the available means to sustain a more or less generous welfare state (Loavza, 1996; Hatipoglu and Ozbek, 2011). Hence, it is central for public policy and also politics of privatization to explore the possibility that the informal sector creates tensions between informal wage earners and their formal counterparts in the sense of exclusion or solidarity among these pivotal voter groups.

# 2.2.2 The Exclusion Hypothesis

Social policy preferences are first of all an outcome of the trade-off between individual costs and benefits for formal sector workers and the individual assessment of the need for insurance. Not only do workers of different income groups take into account the rate of income taxation, they also consider the likelihood of losing their jobs – which involves skill specificity (Iversen and Soskice, 2001) and risk exposure (Mares, 2005) – and the likelihood of sickness, disability, and age, among other factors. The logic of redistribution matters when we think of welfare-provider preferences, since the public system is sustained by fiscal revenue, while social service privatization allocates costs to the individual. Thus, public welfare is more attractive for lower income groups, who

are unable to afford costly schools and expensive medical care, and less attractive for high-income earners, who suffer from cost increases when the welfare state is more generous, a generosity that goes hand in hand with increased redistribution (see Meltzer and Richard, 1981). Opting out of this form of social solidarity might be an attractive option. Even though Latin American welfare states are rather regressive in nature and redistribute with an upward bias (see Lindert et al., 2006), public welfare provision still involves redistributive elements while privatization transfers the opportunity of access to social services to the market rationale. Hence, the 'choice' between public or private welfare provision adheres to the approval or dismissal of redistribution to some part. For those individuals who are not affected by the redistributive rationale, because of the regressivity of the welfare system, the public-private divide can also be a consequence of the problem pressure that arises by deprivation of scarce public resources, mirrored by the informal sector that benefits from these goods without contributing. The exclusion mechanism can work along both of these lines, the first attributing to a redistributive rationale and the second, adhering to fear of deprivation.

Considering the large degree of income inequality in Latin America and following the logic of Meltzer and Richard (1981), as further enhanced by Iversen and Soskice (2006), we would expect the middle-income group to ally with the lower income group regarding their welfare-provider preference, in a simplified model with high rates of inequality. The rich benefit more from private insurance schemes than from public pension, for instance, particularly in societies with high-income inequality and a redistributive social policy. Especially for the high-income earners, social services that are privatized such as schools, hospitals and insurance are likely to be more attractive than the public alternative, as public services go hand in hand with increased taxation, despite the upward bias in the Latin American system.

Adding a large informal sector to this calculation, I assume a shift within this preference structure. I propose the argument that, ceteris paribus, middle-income workers form cross-class alliances with the higher income group when the informal sector increases, in order to escape the high costs that result from "socialization of risks" (Mares and Carnes, 2009, 106) – a generous public social safety system – when the informal

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sector is considerably large. The impact on the high-income group, which already favors private welfare provision based on the rationale of redistribution, should additionally be reinforced by a large informal sector. The underlying logic builds on political economy theories of redistribution and social policy preferences, which argue that preferences are influenced by motives of exclusion (see Corneo and Grüner, 2002) or rivalry between social groups, as exhibited by the insider/outsider debate (Rueda, 2005). A growing informal sector reduces the number of contributors to the public budget and at the same time includes a considerable number of beneficiaries who are likely to pursue access to public welfare goods. Hence, I expect that conditional on a growing informal sector formal wage earners prefer welfare services as club goods instead of public goods.

This preference change should mostly occur for social policies that are most progressive in nature and hence, represent 'real' public goods, so that we need to differentiate between different social policies. The health care sector can be considered as most suitable for this category in LA. One might be inclined to add education to this category as well, but it contains a considerable upward bias as education policy in LA implies a lot of support for the third tier and less so for primary education that would be mostly beneficial for the poor and the informal sector. Moreover, education has a very clear positive impact on economic growth, the employment rate, and democratic stability (see Glaeser et al., 2004), and hence, increases well-being of the overall society, so that the exclusion rationale is less likely to apply for this social  $policy^5$ . Social security in the form of pensions presents to some extent a club good when entitlements are bound to formal employment. However, even though most Latin American systems are built on this Bismarckian style of insurance, welfare support for the elderly is available in the form of Conditional Cash Transfers (CCTs) in several Latin American states (see Barrientos, 2006, and a further discussion in section 2.3) and in some countries a basic pension is provided based on means-tests e. g. in Costa Rica or Ecuador (see Social Security Agency, 2008), giving ambiguity to this policy. Because of the regressivity of social security, preferring public provision might therefore actually reflect the exclusion rationale as well, as more public

⁵The analysis of education provider preferences revealed no effect from the informal sector, as expected. Estimation results are available as supplementary material (see Table C).

goes in line with consolidating the club good character of pensions. Hence, for pensions, both the public and private option might reflect a certain type of exclusion. The private option illustrates exclusion by rejecting redistribution, being the most attractive exclusion option among high-income earners. The public pension option on the other hand can also express exclusion by being bound to formal employment. This should be the most attractive option for the middle-income group when exclusion is the dominant rationale, as the private option is more costly.

H 1 A large informal sector decreases the likelihood that formally employed high- and middle-income workers in particular (a) and formal wage earners in general (b) will prefer to have the state provide health care services. For pensions, the informal sector should mostly decrease preferences for public provision of the high-income group (c).

Latin American countries finance their public budget by a tax mix, relying on a mix of indirect and direct taxation among other forms⁶. Even though the rates of value added taxation (VAT) are considerably high, which is certainly also a consequence of the growing informal sector, income tax is always a central source of public revenue as we see in Peru, Brazil, or Colombia, where the share of direct taxation is more than 45 percent⁷ of the direct-indirect tax ratio. The discourse on tax salience and "fiscal illusion", which dates back to the seminal work of Buchanan (1967), has revealed that indirect taxes are much less visible and recognized by the individual and therefore less salient. Formal wage earners contribute a considerable amount of money to the public budget via both income tax and VAT, compared with informal workers for whom only VAT, the less salient form of taxation, plays a role⁸. Income tax is considered to be more

⁶Acknowledging, that the welfare system is based on a tax mix, involving further forms of taxation than income tax and VAT, the analysis represents a modest approach on the explanation of partial effects resulting only from income taxation.

⁷Calculations are based on IMF GFS data on VAT and income tax revenue for 2008. Only these two types of taxation are considered so that the numbers reflect an incomplete image of the ratio of direct and indirect tax (International Monetary Fund, 2012).

⁸Even though it is less easy to avoid VAT than payroll tax, tax evasion of VAT is also present in the shadow economy since goods and services produced on the black market are not within reach of VAT.

salient for the individual than VAT, so that income tax is presumably a more relevant factor for social policy preferences than contributions based on VAT.

The proposed mechanism sets heavy constraints on the role of the middle class in Latin American societies. Cramer and Kaufman (2011) find that dissatisfaction about unequal income distribution in Latin America is very high within the middle class, compared to the rest of the population, a finding that supports the reasoning elaborated here. However, Roberts (2002) and Portes and Hoffman (2003) argue that the identification as a group no longer breaks along class cleavages in Latin America, an argument that points towards a caveat for the proposed exclusion hypothesis.

# 2.2.3 The Solidarity Hypothesis

The alternative hypothesis to the pure cost–benefit logic of exclusion proposes solidarity between informal and formal workers. However, solidarity is not understood in an altruistic, affective sense but as rational choice. Individuals ally with other groups that are less well-off in order to raise their own status, their future status (see also Piketty, 1995, on social mobility and redistributive preferences), or at least to diminish hazards that emanate from the status of the other group. Paskov and Dewilde (2012) call this concept of solidarity a "calculating solidarity"⁹. Thus, maximizing one's own status is not necessarily the main driver behind social policy preferences, but rather increasing the status of the entire social group one identifies with to pool the chances for benefit, as Lupu and Pontusson (2011) show for social policy preferences of the middle-income group in the OECD context. Formal and informal employment is very permeable and fragile (Perry et al., 2007) in Latin America. Workers switch from one state to another rather frequently over their life cycle because the duration of job tenure is generally very short in Latin America (Schneider and Karcher, 2010). The fact that formal workers may find themselves as free riders in a state of informality in the near future would speak in favor of preferences for public welfare provision. In order to insure against future risk¹⁰,

⁹The authors find empirical support for the assumption that income inequality decreases solidarity. But they examine only European countries, so that we cannot transfer their findings to the developing world without further testing.

¹⁰Informality is more risky than formal employment, because it is usually accompanied with tenuous working contracts, low wages, high volatility, the lack of written contracts or labor protection, and thus

it is rational for formal wage earners to prefer public over private welfare provision when considering future employment in informality.

Figure 2.1 Polarization between informal and formal wage earners (LAB 1995, 1998, 2008, only countries included that participated in all survey years)



Looking at the degree of polarization between formal and informal workers on welfareprovider preferences, I do not find a strong divide between these groups. Figure 2.1 shows the aggregated preferences of informal (dashed grey lines) and formal wage earners (solid black lines) for public provision of pensions, health care, and education, respectively. The distance between the equivalent observations shows the polarization, which is rather low¹¹.

Income inequality is very pronounced in Latin America (low- and middle-income groups are close to each other, the median is below the mean income) so that lowand middle-income groups should generally tend to ally¹². Formal and informal wage earners in these income groups represent the sector of society that not only profits from redistribution but also faces high risks so that an alliance becomes most likely. Solidarity should mostly occur for progressive social policies, which is in this case health care.

has poor long-term perspectives.

¹¹The LAB does not provide data on attitudes towards informal sector workers, so that we have to rely on this approximation by looking at the distance between informal and formal worker preferences.

¹²I refer to the median voter theorem here (Meltzer and Richard, 1981). However, it has to be acknowledged that empirical support for the median voter theorem is very limited. Authors who are studying Western democracies usually do not find a positive effect from income inequality on the welfare state (see Moene and Wallerstein, 2001; Alesina and La Ferrara, 2005; Kenworthy and McCall, 2008).

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H 2 A large informal sector increases the likelihood that formally employed middle-income workers in particular (a) and formal wage earners in general (b) will prefer to have the state provide health care services, owing to the proximity between formal and informal wage earners.

Finally, one could argue that the informal sector is only a consequence of weak state capacity so that it is actually the lack of governmental strength to provide social services that drive welfare provider preferences. But while I find empirical evidence for an impact of the informal sector on provider preferences in the empirical test, I do not detect context effects following from corruption, rule of law, or the level of economic development¹³, factors that approximate the capacity of the state.

## 2.3 Social Policy in Latin America

Before moving to the empirical analysis of the proposed relationship, I will briefly introduce key elements of the social system in Latin America. The welfare systems in LA are marked by an upward bias, favoring the already better off (Lindert et al., 2006). The 1990s were marked by a period of rigorous privatization. Pension reforms were undertaken in almost every Latin American country during this time (Madrid, 2003; Mesa-Lago, 2009). However, the movement to privatize pensions decelerated towards the beginning of the early 2000s to the point that it has now reversed direction (Carnes and Mares, 2013). A look at aggregated preferences for welfare providers by country reveals that approval of public pension provision rose from 72.99 percent in 1995 to 88.9 percent in 2008, in contrast to preferences for a private provider¹⁴.

Some countries still provide universalistic pension schemes such as Bolivia or meanstested systems for noncontributors. Health care and education systems also experienced significant changes during the neoliberal era of the 1990s, as the example of Chile shows. In order to address the problem of poverty, governments introduced Conditional Cash Transfers (CCT) during the 1990s, such as Bolsa Familia in Brazil or Oportunidades

¹³Estimation tables are available as supplementary material (Table B-D).

 $^{^{14}\}mathrm{Own}$  calculations based on the survey item p93stf of the LAB 1995 and 2008.

in Mexico. They provide social services to the lowest income groups. Most of the target population are not formally employed. Eligibility for services is usually linked to conditional requirements such as regular health check-ups and children's school attendance. Transfers are received as subsidies, grants, nonwage income, basic pensions or allowances for older people, among others¹⁵. CCTs are usually financed by the state. The World Bank (WB) or the Inter-American Development Bank (IADB) additionally supports only a few countries. Barrientos (2006) reports that CCTs for old age care are available in Chile, Uruguay, Argentina, Brazil, Costa-Rica, and Bolivia. According to CEPAL's Social Panorama of Latin America, 12 percent of the Latin American population on average was covered by the programs between 2006 and 2009, and 0.25 percent of the country's GDP on average was spent on CCT (Hopenhayn and Beccaria, 2010, 106). Public welfare goods are therefore available to both informal and formal wage earners, which thus fulfills the initial prerequisites for the logic of exclusion and free riding elaborated above.

# 2.4 Statistical Strategy, Data, and Variables

As I am interested in social policy preferences at the micro level, I use survey data from the Latinobarómetro from the year  $2008^{16}$  since this survey year finally contains an item that is sensitive to informal wage earners, – an information which has not been collected so far¹⁷. I apply a multilevel varying-intercept model to test the hypothesis of exclusion and solidarity because the theoretical framework expects influence from both microand macro-level predictors. A hierarchical model enables the analysis of the effect of country-level indicators in contrast to the use of fixed effects (see Steenbergen and Jones, 2002; Gelman and Hill, 2007). In the first part of the analysis, I test in how far the size of the informal sector influences welfare provider preferences for pensions and health care

¹⁵Information is based on the CEPAL study on CCT by Cecchini and Madariaga (2011, 51-58).

 $^{^{16}}$ The 2008 survey covers 19 countries: Argentina, Bolivia, Brazil, Colombia, Costa Rica, Chile, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela, Spain, and Dominican Republic (Level 1 N=22,675). I exclude Spain from the analysis, as it is not a developing country. Further observations are lost due to missing data on some macro variables and survey items, which have not been asked in all countries (Nicaragua, Uruguay, and Venezuela drop out for these reasons).

¹⁷The items for the DV were asked in 1995 and 1998 as well. However, these survey years do not include an item to identify informal wage earners properly, so that the analysis is limited to the survey of 2008.

on average for formal wage earners. Subsequently, I explore which factors influence their welfare-provider preferences to test if the informal sector evokes exclusion motives among the middle- and high-income groups of the formally employed. Additionally, I examine the rationale in a broader theoretical context by using the full sample to analyze the impact of the informal sector on the income groups of the entire society, as a robustness check.

# 2.4.1 Dependent Variable

The dependent variable is the respondent's preference of the state or the private sector to act as the welfare provider of pensions and health care. The LAB asks the respondent if these welfare benefits and services should "mostly be in the hands of the state" or "mostly in the hands of private companies" referring to "health" (item p93sta) and "pension schemes/social security" (item p93stf). The respondent can only choose between the answer categories "state" (coded as 1), "companies" (coded as 0) and "do not know" (coded as missing). As mentioned in section 3, respondents are largely in favor of the state as the main provider¹⁸.

# 2.4.2 Explanatory Variables: Size of the Informal Sector and Income Group

In addition to a range of other occupational categories (item  $s18^{19}$ ), survey respondents are able to clearly indicate in the LAB 2008 that they are informal workers. I identify formal wage earners by items  $s17a^{20}$ , which differentiates between employment, unemployment and other forms such as retirement, and s18, 'type of employment' (e.g. self-employed professional or business owner), where only those respondents who answered in the previous item that they were employed are asked to respond. I code all those respondents

¹⁸The high rate of consent is normal with regard to items that inquire welfare demand or public welfare provision as Dion and Birchfield (2010) emphasize.

¹⁹Question s18: What type of employment do you have? – a) self-employed: professional=1, business owner=2, farmer/fisherman=3, self-employed, informal=4, – b) salaried employee: professional=5, senior management=6, middle management=7, other=8; LAB 2008 (Latinobarómetro, 2012).

²⁰Question s17a: What is your current employment situation? – self-employed (then go to S18), salaried employee in a state company, salaried employee in a private company, temporarily out of work, retired/pensioner, don't work/responsible for shopping and housework LAB 2008 (Latinobarómetro, 2012).

as formally employed who indicate they are salaried employees in either the public or private sector or are self-employed as professionals (management), business owners, and farmers/fishermen. Those who select the category 'informal' in s17a are coded as the informal counterparts. I chose this conservative way to identify respondents by strictly limiting the coding of informals to the category that explicitly asks for informal employment, in order to reduce the risk of overestimating the informal sector.

In this regard I follow the identification strategy of the World Bank researchers Loayza and Rigolini (2011) who illustrate with the application of several validity tests that the usage of the survey category self-employment performs well in identifying informal wage earners as "in most countries there is a strong association between self-employment and informal activity, as most self-employed workers tend to be low-skilled and unregistered workers" (Loayza and Rigolini 2011, 1508). However, one needs to admit that informals who consider themselves as employees might not be captured with this strategy, but information on the employer (e. g. firm size) is not available. Nevertheless, this identification strategy focuses on informal workers who represent the most powerful labor market group among the informals – the self-employed – and hence, the group that might illustrate a competitor to formal wage earners. Thus, even though the informal sector might be underestimated to some extent I capture the most significant group for the mechanisms proposed above. Comparing different identification strategies for the informal economy shows that there is no ideal measurement of this sector yet, which is based on clandestineness by its very definition, even though the 'self-employment' strategy scores well (see Schneider and Enste, 2000).

To measure the size of the informal sector (INFORMAL) at the macro level I calculate the share of informal workers of the working population by country using the survey item (s17a) that identifies informal wage earners as discussed. The Inter-American Development Bank (IADB) provides limited aggregated data on the informal sector. Based on household survey data, they generate a variable for the share of formal workers relative to the working population. One could take the difference between formal workers and the population to estimate the share of informal sector workers. However, in order to identify formal wage earners, they rely on survey items which ask if the respondent contributes to the social security system. The independent variable would then be biased since the measure is based on participation in public welfare services, which is related to the DV here. A further measure of the informal sector is provided by Schneider et al. (2010), who calculate the share of the informal economy relative to GDP for a very large set of countries. This measure does not fully cover the aspect that interests me, that is, the amount of workers in the informal economy. Instead it considers the amount of wealth generated by the informal sector. Therefore, the analysis focuses on the measure of the informal sector based on the LAB as explained above. The variable INFORMAL thus represents the share of informal workers relative to the working population, which is the mediating independent variable in the interaction term.

At the micro level, I examine the impact of different income groups on welfare-provider preferences. As the LAB does not contain an item on household income, I measure personal income based on the possession of assets²¹. Constructing asset indices is a popular approach in health economics and demographic studies on developing countries to generate wealth measures, when household income data is unavailable or unreliable (see Filmer and Pritchett, 2001; Vyas and Kumaranayake, 2006). The asset indicator has to be understood as long-term household status (Filmer and Pritchett 2001, 116). I apply a multiple correspondence analysis (MCA) based on asset ownership²² in order to capture the underlying wealth dimension of owning certain assets such as electricity, hot water, or a television. Responses were given a 1 for owning the asset and 0 for not owning it, respectively. The intuition for MCA is that a number of related variables can be reduced to a single indicator (see Greenacre, 2002; Le Roux and Rouanet, 2010). The first dimension of the MCA covers most variation within the variables, so that I use the predicted values in order to generate income tertiles, identifying the low-, middle- and

²¹The LAB asks the respondents if they own any of the following items: color television, refrigerator/icebox/freezer, own home, computer, washing machine, fixed telephone, mobile phone, car, second or holiday home, running water, hot running water, sewage system, bathroom with shower, electricity. I code 'no answer' as no (instead of coding the category as missing, increasing reduction of observations) since it is more likely that a respondent does not answer the question when she does not possess the item. Differences that occur by this specification are marginal.

²²I test the reliability of the income measure by regressing the income tertiles on different survey items, such as item s2, which asks the respondent about her income satisfaction. Higher income perfectly predicts greater income satisfaction. The MCA income measure also highly correlates with s26, the perception of the interviewer on the socio-economic status of the respondent. For a discussion on the reliability of MCA compared to PCA and consumption data, see Howe et al. (2008).

high-income groups 23 .

# 2.4.3 Controls

In estimating the effects of income and the size of the informal sector, I also control for several covariates at both levels (see Table A, Appendix). As control variables at the micro level serve AGE, gender (FEMALE), years of EDUCATION, LEFT IDEOLOGY, employment status (UNEMPLOYED, RETIRED, non-employed serves as reference category, including housewives and students) and type of employment (FORMAL WORKER, IN-FORMAL WORKER, non-employed as reference category). I also hold constant people's SATISFACTION WITH PRIVATIZATION since individuals who experienced privatization of public utilities, for instance, and who are also satisfied with its functioning are more likely to favor private provision of social services as well. And I control for PUBLIC HEALTH INSURANCE to bring in the status quo. The dummy variable reflects the information that the respondent has public health insurance. UNCERTAINTY is another central aspect for insurance preferences, as scholarly work in this domain has shown (Piketty, 1995; Mares and Carnes, 2009). UNCERTAINTY is operationalized by the respondent's perspective on her employment stability within the coming months. The more individuals worry about job loss, the more they are likely to prefer public over private provision of social services. Further, I include URBAN as control variable, which indicates that the respondent is located in an urban area of the country, so as to incorporate differences in social service provision between urban and rural areas.

As the abundant literature on public opinion on the welfare state suggests (Svallfors, 1997; Brooks and Manza, 2007; Kenworthy and McCall, 2008; Finseraas, 2009), we have to consider reversed causality between social policies that are provided and public support or demand for the welfare system. Hence, I also add data on SOCIAL SECURITY and HEALTH CARE expenditures to the equation, as the level of welfare provided by the state is likely to influence individual preferences for public welfare provision. The data on

 $^{^{23}}$ If the respondent lives in either an urban or rural area needs to be considered for the wealth estimation, since the meaning of owning a certain asset (e.g., sewage system) is likely to vary between cities and periphery. When I calculate the income index for rural and urban areas separately, the income index varies marginally. Yet the differences are so small that the analysis relies on the overall income index of the MCA.

social expenditures is provided by CEPAL (2012). I use per capita values in order to estimate the effect of the average available amount of the particular social service for each citizen. Additionally, I factor in the level of income inequality (GINI COEFFICIENT, taken from Solt (2009)) to hold constant the problem pressure that might follow from inequality.

Last of all, we need to factor in corruption in order to consider fairness of public goods provision. I will use a survey item from the LAB as a control in which respondents report their perception of the number of civil servants who are amenable to bribery and corruption (CORRUPTION PERCEPTION). Since I do not have many degrees of freedom at the macro level, I will restrict the number of macro controls included in the estimation to a minimum²⁴.

#### 2.4.4 Model

I assume that context observations are not independent but cluster within countries so that the use of an OLS regression would be incorrect (Steenbergen and Jones, 2002). The hierarchical model allows for the precise estimation of the effect of country-level variables. The subscript i (for i = 1,..., n) denotes the individual level, while j indicates the group-level unit, meaning countries, (for j = 1,..., N). The DV is a dichotomous variable; therefore, I apply a logistic hierarchical model. I employ a likelihood ratio test in order to test if a random-intercept random-slope model significantly differs from the varying-intercept model, leading to a better model fit. As the test is not significant, I use a varying-intercept model, allowing the intercept to vary between countries²⁵. The use of cross-level interactions between individual- and country-level variables will illustrate

²⁴As a sensitivity test, I include additional macro-level variables, such as corruption measured by the Corruption Perception Index (CPI) of Transparency International, rule of law (WGI, World Bank), and GDP per capita to consider state capacity (individuals are more likely to have greater demand for public welfare when the state is also more capable of reliably providing these benefits, see Mares (2005)). I also tested the model with only the macro variable of interest and stepwise inclusion of further macro variables, as specified above. The results for the independent variables remain robust in both the full sample and the subsample. Surprisingly, income inequality does not show any significant effects. Estimation results are available as supplementary material (see Table A, B, and D).

 $^{^{25}}$ The likelihood-ratio test for the DV pension rejects the use of a random-intercept random-slope model with a p-value of 0.66 (0.23) and for health care with 0.40 (0.70) regarding the full sample (the subsample).

if variation of the possible impact of the independent variable INCOME GROUP differs due to the mediating country-level characteristic of the size of the informal sector as proposed above. INFORMAL is the conditional variable Z in this model. I use the notation as propagated in Gelman and Hill (2007). The group-level coefficients are expressed by  $\gamma$ , and  $\sigma_{\alpha}$  represents the standard deviation of the country-level errors. X is a vector of individual-level predictors, including control variables as discussed in section 4.3. U presents a set of macro-level predictors.

$$\Pr(y_i = 1) = logit^{-1}(\alpha_i + \beta_i X_i + \beta_i \text{income group}_i + \beta_i \text{income group}_i \times Z_i)$$
(2.1)

$$\alpha_j \sim N(\gamma_0^{\alpha} + \gamma_1^{\alpha} + \gamma_2^{\alpha} \mathbf{Z}_j, \sigma_{\alpha}^2)$$

Variables are grandmean standardized (with the exception of variables that are already in the 0/1 range) by subtracting the mean and dividing the term by two standard deviations, as Gelman and Hill (2007) suggest²⁶, since the model contains interaction terms and many dummy variables. Based on the null model, I estimate an intra-class correlation coefficient  $\rho$  in order to explore how much of the variance of the DV is explained by the country level. In order to calculate the intra-class correlation coefficient (ICC), I follow the recommendation of Snijders and Bosker (1999, 224) to divide the variance of the constant term  $\sigma_{\alpha}^2$  by the variance of itself plus the variance of the residual  $\sigma_y^2$ , which is equal to  $\pi^2/3$  for the logistic model (ICC =  $\sigma_{\alpha}^2/(\sigma_{\alpha}^2 + \pi^2/3)$ ). For the dependent variable PENSION, I calculate  $\rho_{DV1}=0.065$  and for HEALTH  $\rho_{DV2}=0.084$ . The intra-class correlations indicate that the country level explains a considerable amount of variation of the dependent variables (e.g., for the DV HEALTH, level two explains 8.4 percent of the variation), so that the use of a hierarchical model is statistically justified and necessary²⁷.

²⁶Using two standard deviations instead of one is particularly recommended for models that comprehend several binary variables regarding the amenability of interpretation.

 $^{^{27}}$  One has to acknowledge that most of the variation of individual-level data on attitudes or opinions is explained by micro-level factors, so that also an ICC of 8.4 percent is sufficient when working with public opinion data.

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To illustrate the results I display a plot for the predicted probability that indicate the incidence rate for the DV when INFORMAL is at different values (Figure 2.2). For the cross-level interactions I plot the average change of predicted probabilities in the dependent variable for the income groups for different values of the size of the informal sector (Figure 2.3-2.6). Changes in probability are calculated on the fixed part of the model and based on averages of the covariates as several dummy variables are included so that holding variables at mean is not reasonable.

# 2.5 Results

# 2.5.1 Average Impact of the Informal Sector

Table 1 displays logistic coefficients for the analysis of the subset of formal wage earners (M 1 and 2), testing hypothesis H1(b), which suggests a negative effect of the informal sector on the formal worker's preferences in general. Indeed, a unit increase in the share of informal sector workers relative to the working population decreases the likelihood that formal wage earners prefer public health care at the one-percent level of significance (Model 2), supporting hypothesis 1(b).

	(M 1)	(M 2)	
	pension	health care	
Micro Predictors			
low income	0.049	-0.058	
	(0.127)	(0.138)	
middle income	-0.081	-0.044	
	(0.098)	(0.108)	
left ideology	0.418***	0.209 +	
	(0.114)	(0.120)	
uncertainty	0.031	0.015	
	(0.025)	(0.027)	
female	-0.005	-0.133	
	(0.083)	(0.090)	

Table 1: Logistic Hierarchical Random-Intercept Regression

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privatization satisfaction	$-0.125^{***}$ (0.031)	$-0.133^{***}$ (0.034)
education	$-0.059^{*}$ (0.025)	$-0.073^{**}$ (0.028)
age	$0.081^{**}$ (0.026)	$0.070^{*}$ (0.028)
urban	$-0.456^{***}$ (0.097)	$-0.272^{**}$ (0.105)
corruption perception	$0.006 \\ (0.021)$	$0.023 \\ (0.023)$
pub. health insurance		$0.252^{**}$ (0.096)
Macro Predictors		
informal	-2.109 (2.416)	$-6.165^{**}$ (2.185)
gini	-0.011 (0.110)	-0.067 (0.098)
social security per capita	$0.014 \\ (0.104)$	
health care per capita		-0.175 (0.110)
constant	$2.656^{***}$ (0.747)	$\begin{array}{c} 4.012^{***} \\ (0.682) \end{array}$
Random Effects Parameter	ers	
Var (constant)	$0.384 \\ (0.156)$	0.230 (0.101)
N Level 1	4799	4799
N Level 2	15	15
Wald Chi2	97.8	77.34
Log-Likelihood	-2083.99	-1814.43
BIC	4295.1	3764.5

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Source: Latinobarómetro 2008; CEPAL (2012), Solt (2009); Standard errors are in parentheses.

I plot the incidence rate of the dependent variable preferences for public health care provision for the informal sector in Figure 2.2. The slope is steeply declining, illustrating



Figure 2.2 Predictive margins of INFORMAL for preferences for public health care

the negative impact. When the informal sector amounts to 50 percent of the population, the likelihood to prefer public health care provision declines to 67 percent. The effect is not significant for pension provider preferences. Hence, so far informality lowers preferences for public health care, the more progressive type of social service, of formal wage earners, supporting the exclusion hypothesis.

#### 2.5.2 Cross-Level Interactions

The central interest lies on the cross-level interactions between INFORMAL and income groups. The interaction term including the middle-income group shows a positive slope in Model 4 (Table 2) for preferences on pensions, illustrated in the marginal effects plot in Figure 2.3. Conditional on a large informal sector, middle-income earners of the formally employed have a positive likelihood to prefer public to private pension provision at the five-percent level of significance. This finding tends to revert H1(a), which assumed an exclusion motive of the formally employed towards informal workers. It rather appears as such that the solidarity motive of middle-income earners holds as proposed in the solidarity hypothesis. However, plotting the interaction effect for middle income on the DV at different values of INFORMAL (Figure 2.3) illustrates that average marginal effects are significant only in the negative range, cushioning the solidarity assumption. Moreover, the positive slope might allude to the exclusion rationale by preferring public pension that is bound to entitlements based on formal employment. For the high-income group, I find a significant negative effect (see Table 2, Model 5), which alludes to the exclusion mechanism H1 (c). As the informal sector increases, the likelihood to prefer public pension provision decreases for higher income formal workers, as is illustrated in Figure 2.4. The rationale of exclusion seems to be at work here. However, for health care I cannot find any significant cross-level interaction effect for the formal wage earner sample.

	(M 3) pension	(M 4) pension	(M 5) pension	(M 6) health care	(M 7) health care	(M 8) health care
Micro Predictors						
low income	$\begin{array}{c} 0.513 \\ (0.489) \end{array}$	$0.081 \\ (0.128)$		$0.204 \\ (0.596)$	-0.055 (0.139)	
middle income	-0.082 (0.098)	$-0.886^{*}$ (0.347)	-0.111 (0.114)	-0.045 (0.108)	-0.116 (0.429)	$0.012 \\ (0.126)$
high income			0.553 (0.379)			-0.019 (0.452)
left ideology	$\begin{array}{c} 0.422^{***} \\ (0.114) \end{array}$	$\begin{array}{c} 0.423^{***} \\ (0.114) \end{array}$	$\begin{array}{c} 0.416^{***} \\ (0.114) \end{array}$	0.210+ (0.120)	0.209+ (0.120)	0.209+ (0.120)
uncertainty	$\begin{array}{c} 0.031 \\ (0.025) \end{array}$	$0.032 \\ (0.025)$	$0.032 \\ (0.025)$	0.015 (0.027)	0.015 (0.027)	0.014 (0.027)
female	-0.004 (0.083)	-0.007 (0.083)	-0.008 (0.083)	-0.132 (0.090)	-0.133 (0.090)	-0.132 (0.090)
privatization satisfaction	$-0.125^{***}$ (0.031)	$-0.122^{***}$ (0.031)	$-0.123^{***}$ (0.031)	$-0.133^{***}$ (0.034)	$-0.133^{***}$ (0.034)	$-0.133^{***}$ (0.034)
education	$-0.059^{*}$ (0.025)	$-0.060^{*}$ (0.025)	$-0.059^{*}$ (0.025)	$-0.073^{**}$ (0.028)	$-0.073^{**}$ (0.028)	$-0.073^{**}$ (0.028)
age	$0.082^{**}$ (0.026)	$0.081^{**}$ (0.026)	$0.081^{**}$ (0.026)	$0.070^{*}$ (0.028)	$0.070^{*}$ (0.028)	$0.070^{*}$ (0.028)
urban	$-0.457^{***}$ (0.097)	$-0.451^{***}$ (0.097)	$-0.451^{***}$ (0.097)	$-0.274^{**}$ (0.105)	$-0.272^{**}$ (0.105)	$-0.273^{**}$ (0.105)
corruption perception	$0.006 \\ (0.021)$	$0.008 \\ (0.021)$	$0.007 \\ (0.021)$	0.023 (0.023)	0.023 (0.023)	$0.023 \\ (0.023)$
pub. health insurance				$0.252^{**}$ (0.096)	$0.252^{**}$ (0.096)	$0.252^{**}$ (0.096)
Macro Predictors						

Table 2: Logistic Hierarchical Random-Intercept Regression

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informal	-1.866 (2.443)	-3.099 (2.455)	-1.239 (2.451)	$-5.988^{**}$ (2.227)	$-6.242^{**}$ (2.229)	$-6.269^{**}$ (2.264)
gini	-0.006 (0.111)	-0.012 (0.110)	-0.018 (0.109)	-0.063 (0.099)	-0.067 (0.098)	-0.066 (0.098)
social security per capita	$0.019 \\ (0.105)$	$\begin{array}{c} 0.011 \\ (0.104) \end{array}$	$\begin{array}{c} 0.005 \\ (0.103) \end{array}$			
health care per capita				-0.170 (0.111)	-0.175 (0.110)	-0.173 (0.110)
Cross-Level Interactions						
low income $\times$ informal	-1.416 (1.437)			-0.777 (1.716)		
middle income $\times \mathrm{informal}$		$2.642^{*}$ (1.097)			0.228 (1.315)	
high income $\times \mathrm{informal}$			-1.910+(1.132)			$0.238 \\ (1.327)$
constant	$2.582^{***}$ (0.755)	$2.948^{***}$ (0.758)	$2.413^{**}$ (0.763)	$3.957^{***}$ (0.695)	$4.035^{***}$ (0.695)	$3.990^{***}$ (0.713)
Random Effects Parameters						
Var (constant)	0.389	0.384	0.378	0.232	$0.230^{*}$	0.231
	(0.158)	(0.156)	(0.154)	(0.101)	(0.100)	(0.101)
N Level 1	4799	4799	4799	4799	4799	4799
N Level 2	15	15	15	15	15	15
Wald Chi2	98.51	103.29	100.64	77.31	77.38	77.3
Log-Likelihood	-2083.5	-2081.11	-2082.58	-1814.33	-1814.42	-1814.41
BIC	4302.6	4297.8	4300.8	3772.7	3772.9	3772.9

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001 Source: Latinobarómetro 2008; CEPAL (2012);

Solt (2009); Standard errors are in parentheses.

Turning to individual-level predictors, formal workers are driven by LEFT IDEOLOGY and SATISFACTION WITH PRIVATIZATION. While the former increases the likelihood to prefer public welfare provision for pensions (Model 3-5) and for health care (Model 6-8), the latter decreases this likelihood at the highest level of significance. The direction of the coefficients is very much in line with theoretical expectations. EDUCATION also exerts a negative effect on preferences for public pensions and health care. This is not surprising as we can expect that individuals who are better educated have a higher income and thus prefer to take care of themselves instead of paying more contributions. UNCERTAINTY does not seem to be a relevant factor for welfare-provider preferences, which is a surprising observation, considering the academic debate on uncertainty and redistributive preferences. A very stunning result is that income does not exert a stronger


Figure 2.3 Average marginal effects for middle-income group at different values of INFORMAL for preferences for public pensions

Figure 2.4 Average marginal effects for high-income group at different values of INFORMAL for preferences for public pensions



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influence on the welfare-provider preferences of formal wage earners in contrast to the theoretical claims elaborated above, the effects are very small.

#### 2.5.3 Cross-Level Interactions for the Full Sample

Table 3 shows the impact on the welfare-provider preferences of income groups, conditional on a growing informal sector, for the entire society, in order to test the sensitivity of the previous results in a broader theoretical context. Here, the middle-income group includes not only formal wage earners but also housewives, retirees, and students, who might have contributed to the welfare system during their life cycle or who will do so in the future²⁸. Therefore, I examine whether the motive of exclusion or solidarity is also present among the middle-income group when the "middle class" of the entire society is considered. Table 3 shows the results for the logistic hierarchical varying-intercept model as tested above, including dummy variables for employment categories.

	(M 9) pension	(M 10) pension	(M 11) pension	(M 12) health care	(M 13) health care	(M 14) health care
Micro Predictors						
low income	$0.750^{*}$ (0.329)	0.150+ (0.081)		-0.303 (0.375)	0.098 (0.087)	
middle income	0.114 + (0.066)	$-0.595^{*}$ (0.244)	$\begin{array}{c} 0.012\\ (0.072) \end{array}$	$0.102 \\ (0.071)$	0.528+ (0.303)	-0.023 (0.078)
high income			$0.247 \\ (0.265)$			-0.277 (0.311)
left ideology	$\begin{array}{c} 0.285^{***} \\ (0.073) \end{array}$	$0.280^{***}$ (0.073)	$0.279^{***}$ (0.073)	0.139+ (0.076)	0.142+ (0.076)	0.141+ (0.076)
uncertainty	$\begin{array}{c} 0.014 \\ (0.021) \end{array}$	$\begin{array}{c} 0.015 \\ (0.021) \end{array}$	$0.014 \\ (0.021)$	0.003 (0.022)	0.003 (0.022)	$0.003 \\ (0.022)$
female	$\begin{array}{c} 0.073 \ (0.058) \end{array}$	$\begin{array}{c} 0.073 \ (0.058) \end{array}$	$0.069 \\ (0.058)$	-0.041 (0.062)	-0.040 (0.062)	-0.039 (0.062)
privatization satisfaction	$-0.101^{***}$ (0.020)	$-0.100^{***}$ (0.020)	$-0.100^{***}$ (0.020)	$-0.114^{***}$ (0.022)	$-0.115^{***}$ (0.022)	$-0.114^{***}$ (0.022)
education	$-0.047^{**}$ (0.017)	$-0.047^{**}$ (0.017)	$-0.047^{**}$ (0.017)	$-0.050^{**}$ (0.018)	$-0.050^{**}$ (0.018)	$-0.050^{**}$ (0.018)

Table 3: Logistic Hierarchical Random-Intercept Regression

Continued on Next Page...

 $^{28}{\rm Of}$  course, informal wage earners also reflect a part of the entire society, but the model controls for informal sector workers.

age	$0.077^{***}$ (0.016)	$0.077^{***}$ (0.016)	$0.077^{***}$ (0.016)	$0.081^{***}$ (0.018)	$0.081^{***}$ (0.018)	$0.081^{***}$ (0.018)
urban	$-0.340^{***}$ (0.063)	$-0.337^{***}$ (0.063)	$-0.340^{***}$ (0.063)	$-0.173^{**}$ (0.067)	$-0.174^{**}$ (0.067)	$-0.174^{**}$ (0.067)
corruption perception	$0.001 \\ (0.014)$	$0.002 \\ (0.014)$	$0.001 \\ (0.014)$	0.027+ (0.015)	0.027+ (0.015)	0.027+ (0.015)
unemployed	-0.098 (0.121)	-0.094 (0.121)	-0.096 (0.121)	-0.174 (0.128)	-0.176 (0.128)	-0.174 (0.128)
retired	-0.112 (0.147)	-0.110 (0.146)	-0.117 (0.146)	$-0.486^{**}$ (0.149)	$-0.488^{**}$ (0.149)	$-0.485^{**}$ (0.149)
formal worker	-0.151 (0.094)	-0.146 (0.094)	-0.151 (0.094)	-0.191+ (0.102)	-0.193+ (0.102)	-0.191+ (0.102)
informal worker	$0.050 \\ (0.107)$	$0.048 \\ (0.107)$	$0.044 \\ (0.107)$	-0.111 (0.114)	-0.110 (0.114)	-0.107 (0.114)
pub. health insurance				$0.275^{***}$ (0.064)	$0.275^{***}$ (0.064)	$0.275^{***}$ (0.064)
Macro Predictors						
informal	-2.560 (1.788)	$-3.773^{*}$ (1.795)	-2.437 (1.801)	$-7.128^{***}$ (1.666)	$-6.367^{***}$ (1.673)	$-6.998^{***}$ (1.697)
gini	$\begin{array}{c} 0.033 \\ (0.081) \end{array}$	$\begin{array}{c} 0.026 \\ (0.081) \end{array}$	$0.022 \\ (0.081)$	-0.029 (0.073)	-0.023 (0.074)	-0.020 (0.074)
social security per capita	$0.027 \\ (0.077)$	$0.018 \\ (0.076)$	$0.014 \\ (0.076)$			
health care per capita				$-0.181^{*}$ (0.082)	$-0.173^{*}$ (0.082)	$-0.169^{*}$ (0.083)
Cross-Level Interaction	IS					
low in come vinformed						
low income $\times$ informal	$-1.895^{*}$ (0.951)			1.238 (1.079)		
middle income ×informal		$2.289^{**}$ (0.755)			-1.341 (0.914)	
			-1.141 (0.792)			0.494 (0.920)
middle income $\times$ informal						
middle income $\times$ informal high income $\times$ informal	(0.951) 2.696*** (0.557)	(0.755) 3.060***	(0.792) $2.764^{***}$	<ul><li>(1.079)</li><li>4.262***</li></ul>	(0.914) 4.029***	(0.920) $4.343^{***}$
middle income $\times$ informal high income $\times$ informal constant	(0.951) 2.696*** (0.557) eters 0.211	(0.755) 3.060*** (0.559) 0.209	$(0.792) \\ 2.764^{***} \\ (0.565) \\ 0.208$	$(1.079)$ $4.262^{***}$ $(0.524)$ $0.133$	(0.914) 4.029*** (0.525) 0.135	$(0.920) \\ 4.343^{***} \\ (0.538) \\ 0.136$
middle income ×informal high income ×informal constant <b>Random Effects Param</b> Var (constant)	(0.951) 2.696*** (0.557) eters 0.211 (0.082)	(0.755) 3.060*** (0.559) 0.209 (0.082)	$(0.792)$ $2.764^{***}$ $(0.565)$ $0.208$ $(0.081)$	$(1.079)$ $4.262^{***}$ $(0.524)$ $0.133$ $(0.055)$	$(0.914)$ $4.029^{***}$ $(0.525)$ $0.135$ $(0.056)$	$\begin{array}{c} (0.920) \\ 4.343^{***} \\ (0.538) \\ \hline 0.136 \\ (0.056) \end{array}$
middle income ×informal high income ×informal constant <b>Random Effects Param</b> Var (constant) N Level 1	(0.951) 2.696*** (0.557) eters 0.211 (0.082) 11493	$\begin{array}{c} (0.755) \\ \hline 3.060^{***} \\ (0.559) \\ \hline 0.209 \\ (0.082) \\ \hline 11493 \end{array}$	$\begin{array}{c} (0.792) \\ \hline 2.764^{***} \\ (0.565) \\ \hline 0.208 \\ (0.081) \\ \hline 11493 \end{array}$	(1.079) $(1.079)$ $(0.524)$ $(0.524)$ $(0.055)$ $(0.055)$ $(0.055)$ $(0.053)$	$(0.914)$ $4.029^{***}$ $(0.525)$ $0.135$ $(0.056)$ $11493$	$(0.920) \\ 4.343^{***} \\ (0.538) \\ 0.136 \\ (0.056) \\ 11493 \\ (0.920) \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 $
middle income ×informal high income ×informal constant <b>Random Effects Param</b> Var (constant) N Level 1 N Level 2	(0.951) 2.696*** (0.557) eters 0.211 (0.082) 11493 15	(0.755) $(0.755)$ $(0.559)$ $(0.082)$ $(0.082)$ $11493$ $15$	$\begin{array}{c} (0.792) \\ \hline 2.764^{***} \\ (0.565) \\ \hline 0.208 \\ (0.081) \\ \hline 11493 \\ 15 \end{array}$	(1.079) $(1.079)$ $(0.524)$ $(0.524)$ $(0.055)$ $(0.055)$ $(11493)$ $15$	(0.914) $(0.914)$ $(0.525)$ $(0.525)$ $(0.056)$ $11493$ $15$	$(0.920) \\ 4.343^{***} \\ (0.538) \\ 0.136 \\ (0.056) \\ 11493 \\ 15 \\ (0.920) \\ 15 \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.920) \\ (0.9$
middle income ×informal high income ×informal constant <b>Random Effects Param</b> Var (constant) N Level 1	(0.951) 2.696*** (0.557) eters 0.211 (0.082) 11493	$\begin{array}{c} (0.755) \\ \hline 3.060^{***} \\ (0.559) \\ \hline 0.209 \\ (0.082) \\ \hline 11493 \end{array}$	$\begin{array}{c} (0.792) \\ \hline 2.764^{***} \\ (0.565) \\ \hline 0.208 \\ (0.081) \\ \hline 11493 \end{array}$	(1.079) $(1.079)$ $(0.524)$ $(0.524)$ $(0.055)$ $(0.055)$ $(0.055)$ $(0.053)$	$(0.914)$ $4.029^{***}$ $(0.525)$ $0.135$ $(0.056)$ $11493$	$(0.920) \\ 4.343^{***} \\ (0.538) \\ 0.136 \\ (0.056) \\ 11493 \\ (0.920) \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 \\ 0.920 $

 $\label{eq:Figure 2.5} Figure 2.5 \mbox{ Average marginal effects for middle-income group at different values of INFORMAL for preferences for public pensions: Full sample$ 



Figure 2.6 Average marginal effects for low-income group at different values of INFORMAL for preferences for public pensions: Full sample



When we focus on cross-level interactions as the informal sector increases, middleincome earners have again an increased likelihood to prefer public pensions (Model 10) in contrast to the high-income group, which shows a negative conditional effect in Models 11 (PENSION) which narrowly misses significance by a p value of 0.15. The pattern is similar to the results for the formal wage earner sample. For the middle-income group, changes in the DV are significant for lower values of INFORMAL and higher values of INFORMAL (Figure 2.5), indicating a preference change of the overall middle-income group at higher rates of the informal sector favoring public provision of pensions. But again, the positive slope might speak for exclusion as well, reflecting the intention to consolidate the club good character of formal public pensions. The negative cross-level interaction effect for the low-income group, plotted in Figure 2.6 shows a negative slope, which is in contrast to theoretical expectations, but the marginal effects are only significant in the positive range so that we cannot speak of exclusion motives among the low-income earners.

The analysis provides ambiguous support for the exclusion hypothesis 1(b) that the informal sector decreases preferences for the state as the provider of health care on average. It alludes to the solidarity hypothesis, suggesting that a large informal sector leads to cross-class alliances between the middle-income group and the informal sector in preferring public provision of pensions. However, keeping the regressivity of the social security system in mind, opting for the public solution can also be a form of exclusion, as public pensions are to some extent already a club good. The informal sector does not appear to influence cross-class alliances for preferences on health care provision – the more progressive type of social policy – in contrast to expectations, so that the average exclusion effect finds the most robust empirical support. Further tests on concrete social services, calculating solidarity, risk aversion regarding future employment in informality, and rivalry are needed in order to examine the causal mechanism of the proposed hypotheses. The statistical analysis employed here only shows the *effect* and thus opens up a whole new research field that should be pursued with further empirical research on the mechanism, which has been restricted to date due to limited data availability on the informal-formal worker nexus.

#### 2.6 Conclusion

The analysis has shown that the informal sector matters for welfare-provider preferences both of the formally employed and of the general public in Latin America. Alluding to the insider/outsider debate (Rueda, 2006), I contend that in low- and middle-income countries labor markets are familiar with a similar divide – formal and informal employment.

While formal workers contribute to the social safety system by means of direct taxation, informal wage earners are able to free ride on public welfare goods. Thus, I proposed the exclusion hypothesis that draws on a cost–benefit logic and the rival argument that contested this assumption – the solidarity hypothesis – suggested that the middle-income group rather allies with the informal sector, by preferring welfare goods provided as public goods to insure the risk from potential employment in informality in the future. The analysis supports the exclusion hypothesis for welfare preferences on health care – the more progressive type of social policy – of formal wage earners and the Latin American society in general. Conditional on a growing informal sector, the likelihood to prefer health care as public goods declines on average. At the same time, the likelihood that the high-income group, which generally tends to prefer welfare goods as club goods because of the logic of redistribution, prefers public provision of pensions decreases even further as the informal sector grows, which strengthens the exclusion mechanism as well. For the middle-income group I find a positive effect for pension provider preferences, alluding to the solidarity mechanism for this type of social policy. However, the positive effect could still speak for exclusion, because of the club good character of pensions, so that preferring public provision actually reflects opting out of social solidarity as well in this case. Further qualitative research is needed to unravel individual motives that have been irradiated by the analysis.

Most strikingly, income did not appear as the most decisive cleavage for welfareprovider preferences among the formally employed, in contrast to left ideology and privatization satisfaction, which are most influential. The study has shown the need to examine the effect of the informal sector on social policy preferences of formal wage earners and the society as a whole in order to understand the dynamics of the labor market of low- and middle-income economies. The study contributes to the newly emerging literature on the welfare state that points out that welfare preferences are not only affected by income status but also by the level or risk exposure (Rehm et al., 2012), mirrored here by the informal sector. This study is a first step towards a more fine-grained understanding of the impact of the informal sector on the welfare states in low- and middle-income economies.

# 2.7 Appendix

Variable	Observations	Mean	Std. Dev.	Min.	Max.
DV					
pension	11493	0.841	0.365	0	1
health care	11493	0.868	0.338	0	1
Micro Predictors					
left ideology	11493	0.188	0.391	0	1
uncertainty	11493	3.826	1.275	1	5
female	11493	0.494	0.500	0	1
privatization satisfaction	11493	1.739	1.201	0	4
public health insurance	11493	0.420	0.494	0	1
education (years of education)	11493	9.639	4.361	1	17
age	11493	38.966	15.917	16	93
low income	11493	0.295	0.456	0	1
middle income	11493	0.350	0.477	0	1
high income	11493	0.354	0.478	0	1
unemployed	11493	0.058	0.235	0	1
retired	11493	0.062	0.242	0	1
informal worker	11493	0.168	0.374	0	1
formal worker	11493	0.418	0.493	0	1
urban	11493	0.674	0.469	0	1
corruption perception	11493	68.834	28.173	0	100
Macro Predictors					
informal	11493	0.303	0.078	0.140	0.413
gini	11493	48.708	2.802	43.025	53.313
health care per capita	11493	134.890	103.836	20	310
social security per capita	11493	233.978	220.022	13	683

Table A	Table	ΑĽ	Descriptive	statistics
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Source: Latinobarómetro 2008; CEPAL (2012); (Solt 2009)

# 2.8 Supplementary Material

	(M 15) pension	(M 16) health care	(M17) pension	(M 18) health care
	<b>F</b>		1	
Micro Predictors				
low income	0.050	-0.064	0.115	0.112
	(0.127)	(0.138)	(0.080)	(0.086)
middle income	-0.081	-0.051	0.118 +	0.093
	(0.098)	(0.108)	(0.066)	(0.071)
left ideology	0.419***	0.206 +	0.282***	0.140 +
	(0.114)	(0.120)	(0.073)	(0.076)
uncertainty	0.031	0.018	0.014	0.005
	(0.025)	(0.027)	(0.021)	(0.022)
female	-0.004	-0.134	0.070	-0.040
	(0.083)	(0.090)	(0.058)	(0.062)
privatization satisfaction	-0.124***	-0.146***	-0.103***	-0.124***
	(0.031)	(0.034)	(0.020)	(0.022)
education	-0.060*	-0.076**	-0.047**	-0.052**
	(0.025)	(0.028)	(0.017)	(0.018)
age	0.081**	0.069*	0.077***	0.081***
	(0.026)	(0.028)	(0.016)	(0.018)
urban	-0.460***	-0.277**	-0.343***	-0.177**
	(0.097)	(0.105)	(0.063)	(0.067)
corruption perception	0.006	0.021	0.000	0.026 +
	(0.021)	(0.023)	(0.014)	(0.015)
public health insurance		0.269**		0.286***
1		(0.096)		(0.064)
unemployed			-0.098	-0.175
anompioyou			(0.121)	(0.128)
retired			-0.117	-0.49**
louiou			(0.146)	(0.149)
formal worker			-0.15	-0.182 +
			(0.094)	(0.102)
informal worker			0.045	-0.107
			(0.107)	(0.114)
Macro Predictors				
gini	0.038 (0.130)	-0.036 (0.132)	0.042	0.003
	· · · ·	· · · ·	(0.102)	(0.117)
GDP pc	0.166	0.160	0.128	0.141
	(0.162)	(0.173)	(0.127)	(0.152)

Table A: Robustness test: GDP per capita and welfare provider preferences

Continued on Next Page...

#### 66 Chapter 2 Public versus Private Welfare Provision

social security pc	-0.051 (0.125)		-0.026 (0.098)	
health care pc		-0.138 (0.156)		-0.109 (0.138)
constant	$\begin{array}{c} 2.031^{***} \\ (0.199) \end{array}$	$2.184^{***} \\ (0.206)$	$\begin{array}{c} 1.942^{***} \\ (0.161) \end{array}$	$2.13^{***}$ (0.178)
Random Effects Parameters				
var (intercept)	$\begin{array}{c} 0.375 \ (0.153) \end{array}$	$\begin{array}{c} 0.357 \\ (0.146) \end{array}$	$0.234 \\ (0.090)$	0.292 (0.114)
N Level 1	4799	4799	11493	11493
N Level 2	15	15	15	15
Wald Chi ²	98.26	72.69	174.4	144.18
Log Likelihood	-2083.86	-1817.18	-4764.68	-4259.67
BIC	4294.9	3770	9707	8706.3

## 2.8 Supplementary Material 67

	(M 19) pension	(M 20) health care	(M 21) pension	(M 22) health care
Micro Predictors	-			
low income	0.046 (0.127)	-0.065 (0.138)	0.114 (0.080)	0.112 (0.086)
middle income	-0.083	-0.051	0.118+	0.093
	(0.098)	(0.108)	(0.066)	(0.055) $(0.071)$
left ideology	0.418***	0.20+	0.282***	0.14 +
	(0.114)	(0.120)	(0.073)	(0.076)
uncertainty	0.032	0.018	0.014	0.005
	(0.025)	(0.027)	(0.021)	(0.022)
female	-0.006	-0.134	0.07	-0.040
	(0.083)	(0.090)	(0.058)	(0.062)
privatization satisfaction	-0.128***	-0.146***	-0.104***	-0.125***
	(0.031)	(0.034)	(0.020)	(0.022)
education	-0.059*	-0.075**	$-0.047^{**}$	-0.052**
	(0.025)	(0.028)	(0.017)	(0.018)
age	0.081**	$0.069^{*}$	0.077***	0.081***
	(0.026)	(0.028)	(0.016)	(0.018)
urban	-0.456***	-0.272**	-0.341***	-0.174**
	(0.097)	(0.105)	(0.063)	(0.067)
corruption perception	0.006	0.022	0.000	0.027 +
	(0.021)	(0.023)	(0.014)	(0.015)
public health insurance		0.266**		0.283***
		(0.096)		(0.064)
unemployed			-0.099	-0.175
			(0.121)	(0.128)
retired			-0.117	-0.489**
			(0.146)	(0.149)
formal worker			-0.151	-0.184+
			(0.094)	(0.102)
informal worker			0.045	-0.107
			(0.107)	(0.114)
Macro Predictors				
gini	-0.046	-0.103	-0.022	-0.070
	(0.106)	(0.127)	(0.082)	(0.111)
corruption (CPI)	0.007	-0.034	-0.028	-0.071
	(0.096)	(0.109)	(0.074)	(0.095)
social security pc	0.026		0.019	
	(0.115)		(0.089)	
health care pc		-0.075		-0.087

Table B: Robustness test: Corruption and welfare provider preferences

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		(0.154)		(0.134)
constant	$2.030^{***}$ (0.205)	$2.177^{***}$ (0.209)	$1.939^{***}$ (0.164)	$2.124^{***}$ (0.179)
Random Effects Parameters				
var (intercept)	0.410	0.377	0.249	0.298
	(0.164)	(0.153)	(0.096)	(0.116)
N Level 1	4799	4799	11493	11493
N Level 2	15	15	15	15
Wald Chi2	97.46	71.83	173.58	143.74
Log Likelihood	-2084.36	-1817.55	-4765.11	-4259.82
BIC	4295.9	3770.7	9707.9	8706.6

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001Source: Latinobarómetro 2008; CEPAL (2012); Corruption Perception Index (CPI) Transparency International; Standard errors are in parentheses.

	(M 23) Pension	(M 24) Health Care	(M 25) Education	(M 26) Pension	(M 27) Health Care	(M 28) Education
Micro Predictors						
low income	$0.049 \\ (0.127)$	-0.058 (0.138)	-0.086 (0.145)	$\begin{array}{c} 0.117 \\ (0.080) \end{array}$	$0.116 \\ (0.086)$	$\begin{array}{c} 0.082 \\ (0.090) \end{array}$
middle income	-0.081 (0.098)	-0.044 (0.108)	-0.044 (0.117)	0.119 + (0.066)	$\begin{array}{c} 0.097 \\ 0.071 \end{array}$	$0.182^{*}$ (0.077)
left ideology	$\begin{array}{c} 0.418^{***} \\ (0.114) \end{array}$	0.209+ (0.120)	$0.358^{**}$ (0.132)	$\begin{array}{c} 0.282^{***} \\ (0.073) \end{array}$	0.140+ (0.076)	$0.276^{***}$ (0.083)
uncertainty	0.031 (0.025)	0.015 (0.027)	-0.027 (0.030)	$0.014 \\ (0.021)$	0.003 (0.022)	-0.035 (0.025)
female	-0.005 (0.083)	-0.133 (0.090)	-0.120 (0.096)	$0.070 \\ (0.058)$	-0.039 (0.062)	-0.017 (0.066)
privatization satisfaction	$-0.125^{***}$ (0.031)	$-0.133^{***}$ (0.034)	$-0.174^{***}$ (0.037)	$-0.101^{***}$ (0.020)	$-0.114^{***}$ (0.022)	$-0.123^{***}$ (0.023)
education	$-0.059^{*}$ (0.025)	$-0.073^{**}$ (0.028)	$0.006 \\ (0.029)$	$-0.047^{**}$ (0.017)	$-0.050^{**}$ (0.018)	-0.022 (0.019)
age	$0.081^{**}$ (0.026)	$0.070^{*}$ (0.028)	$0.071^{*}$ (0.030)	$0.077^{***}$ (0.016)	$0.081^{***}$ (0.018)	$0.080^{***}$ (0.019)
urban	$-0.456^{***}$ (0.097)	$-0.272^{**}$ (0.105)	$-0.425^{***}$ (0.113)	$-0.341^{***}$ (0.063)	$-0.173^{**}$ (0.067)	$-0.293^{***}$ (0.072)
corruption	$0.006 \\ (0.021)$	$0.023 \\ (0.023)$	$0.002 \\ (0.025)$	$0.001 \\ (0.014)$	0.027+ (0.015)	-0.022 (0.016)
public health insurance		$0.252^{**}$ (0.096)			$0.275^{***}$ (0.064)	
unemployed				-0.098 (0.121)	-0.174 (0.128)	-0.084 (0.137)
retired				-0.117 (0.146)	$-0.484^{**}$ (0.149)	-0.137 (0.163)
formal worker				-0.153 (0.094)	-0.190+ (0.102)	-0.164 (0.108)
informal worker				$0.045 \\ (0.107)$	-0.108 (0.114)	-0.045 (0.122)
Macro Predictors						
informal sector	-2.109 (2.416)	$-6.165^{**}$ (2.185)	-3.426 (3.060)	-2.937+(1.771)	$-6.795^{***}$ (1.649)	-3.530 (2.302)
gini	-0.011 (0.110)	-0.067 (0.098)	$0.020 \\ (0.122)$	$0.026 \\ (0.081)$	-0.023 (0.074)	$0.042 \\ (0.091)$
social security pc	$0.014 \\ (0.104)$			$0.019 \\ (0.076)$		

Table C: Logistic hierarchical varying-intercept regression: Subgroup and full sample with additional DV for education

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health care pc		-0.175 (0.110)			$-0.172^{*}$ (0.082)	
education pc			-0.081 (0.139)			-0.043 (0.104)
constant	$2.656^{***}$ (0.747)	$4.012^{***}$ (0.682)	$3.537^{***}$ (0.939)	$2.817^{***}$ (0.552)	$4.156^{***}$ (0.518)	$3.438^{***}$ (0.710)
Random Effects Parameters						
var (intercept)	0.384	0.23	0.471	0.209	0.135	0.271
	(0.156)	(0.101)	(0.195)	(0.082)	(0.056)	(0.106)
N Level 1	4799	4799	4799	11493	11493	11493
N Level 2	15	15	15	15	15	15
Wald Chi ²	97.8	77.34	60.06	175.61	156.33	111.04
Log Likelihood	-2083.99	-1814.43	-1623.71	-4763.92	-4254.35	-3838.76
BIC	4295.1	3764.5	3374.6	9705.5	8695.7	7855.2

control variables	-		-	
	(M 29) pension	(M 30) health care	(M 31) pension	(M 32) health care
Micro Predictors low income	0.050	-0.056	0.116	0.116
low income	(0.127)	(0.138)	(0.080)	(0.086)
	(0.127)	(0.150)	(0.000)	(0.000)
middle income	-0.080	-0.042	0.119 +	0.098
	(0.098)	(0.108)	(0.066)	(0.071)
	0 410***	0.000	0 000***	0.1.40
left ideology	$0.419^{***}$ (0.114)	0.209+ (0.120)	$0.282^{***}$ (0.073)	0.140+ (0.076)
	(0.114)	(0.120)	(0.073)	(0.070)
uncertainty	0.031	0.014	0.014	0.003
	(0.025)	(0.027)	(0.021)	(0.022)
C	0.004	0 191	0.070	0.020
female	-0.004	-0.131 (0.090)	0.070	-0.039
	(0.083)	(0.090)	(0.058)	(0.062)
privatization satisfaction	-0.122***	-0.128***	-0.100***	-0.112***
	(0.031)	(0.034)	(0.020)	(0.022)
advantion	0.050*	-0.073**	-0.046**	-0.050**
education	$-0.059^{*}$ (0.025)	$(0.073^{++})$	(0.017)	(0.018)
	(0.020)	(0.020)	(0.011)	(0.010)
age	$0.081^{**}$	$0.070^{*}$	$0.077^{***}$	$0.081^{***}$
	(0.026)	(0.028)	(0.016)	(0.018)
urban	-0.459***	-0.276**	-0.342***	-0.176**
urban	(0.097)	(0.105)	(0.063)	(0.067)
	(0.001)	(0.100)	(0.000)	(0.001)
corruption perception	0.005	0.022	-0.000	0.026 +
	(0.021)	(0.023)	(0.014)	(0.015)
pub. health insurance		0.255**		0.277***
pub. nearth institutiee		(0.096)		(0.064)
		()		()
unemployed			-0.097	-0.172
			(0.121)	(0.128))
retired			-0.119	-0.485**
lounda			(0.146)	(0.149)
			()	· · · ·
formal worker			-0.154	-0.190+
			(0.094)	(0.102)
informal worker			0.045	-0.108
monte			(0.107)	(0.114)
			· · · /	× /
Macro Predictors				
informal	-3.449	-7.118**	-4.765*	-7.455***
	(3.199)	(2.427)	(2.302)	(1.826)
	()	·· /	( , , , , , , , , , , , , , , , , , , ,	()
gini	0.073	0.009	0.085	0.037
	(0.128)	(0.109)	(0.092)	(0.082)
GDP per capita	0.134	0.116	0.070	0.100
por capito	(0.165)	(0.136)	(0.118)	(0.102)
	、 <i>'</i>	· /	· /	` '

Table D: Robustness test: Adding rule of law and GDP pc as further macro control variables

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rule of law	-0.120 (0.126)	-0.094 (0.109)	-0.131 (0.091)	-0.067 (0.082)
social security per capita	$\begin{array}{c} 0.014 \\ (0.134) \end{array}$		$\begin{array}{c} 0.051 \\ (0.097) \end{array}$	
health care per capita		-0.171 (0.152)		-0.180 (0.114)
constant	$3.063^{**}$ (0.976)	$\begin{array}{c} 4.301^{***} \\ (0.750) \end{array}$	$3.371^{***}$ (0.707)	$4.358^{***}$ (0.568)
Random Effects Param	eters			
Var (constant)	0.340	0.201	0.177	0.117
	(0.141)	(0.091)	(0.070)	(0.050)
N Level 1	4799	4799	11493	11493
N Level 2	15	15	15	15
Wald Chi ²	99.04	79.54	178.09	159.71
Log-Likelihood	-2083.2549	-1813.6673	-4762.81	-4253.51
BIC	4310.6	3779.9	9722.0	8712.7

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### Chapter 3

# Labour Market Stratification and Social Policy in Latin America

#### Abstract

This study seeks to explain whether social policy preferences of formal and informal workers in Latin America and the Caribbean are triggered by diverging factors. Building on canonical insights from political economy theory, I analyse formal and informal workers' preferences employing a hierarchical model on pooled survey data from LAPOP 2008 and 2010. The article tests whether informal workers are driven mainly by economic self-interest to increase gains from non-contributory public welfare goods. While economic self-interest is an influential factor for formal workers, it is unexpectedly much less so for informals. Informal workers do not have exaggerated welfare expectations.

#### 3.1 Introduction

The Latin American public is not a homogeneous entity with monolithic preferences when it comes to social policy. Serious income inequalities create unhappy cleavages that run vertically through society but a central structural divide also exists horizontally among the working population: that between formal and informal employment. Latin American countries and the Caribbean (LAC hereafter) foster a stratified labour market, creating insiders (formals) on the one hand who contribute to the welfare state via payroll taxation, and outsiders (informals) on the other who while possibly being able to free-ride on certain public welfare goods, remain excluded from employment-related social services and do not pay income tax. Both formals and informals share short-term horizons regarding their employment situation in LAC but their costs and benefits differ (e. g. Loayza and Rigolini, 2011). Drawing upon insider-outsider theory (Lindbeck and Snower, 1986) that considers how labour market institutions can create or reinforce dualization of the labour market in advanced industrial states (Saint-Paul, 1996; Rueda, 2005, 2006; Häusermann and Schwander, 2012), it is important to scrutinize whether dualization and, consequently, polarization between significant labour market groups in terms of the scope of social policies that they prefer is also taking place in low- and middle-income democracies. "[W]elfare states may compensate for labor market segmentation, but - conversely - they may also perpetuate labor market inequalities or even reinforce occupational divides" as Häusermann and Schwander (2012, 28) emphasize, potentially leading to social cleavages, polarization between the labour market participants and political mobilization. While insiders can rely on social protection, outsiders lack support to cope with adverse life effects and the loss of income in old age. As Rueda (2006, 367) argues, labour market insiders and outsiders of advanced industrial states have different social policy preferences due to distinguishable costs and benefits. And Burgoon and Dekker (2010) support this intuition, illustrating that flexible employment induces higher demand for social policies that increase unemployment benefits in contrast to secure employment. So the first question to ask is whether informal sector workers in developing countries have different social policy preferences on redistribution and welfare provision than their formal counterparts. Do informals as potential outsiders have a different take on the welfare state?

As I show in the following, the level of social policy preferences does not vary decisively between formal and informal wage earners. Their demands for welfare and attitudes toward redistribution are similarly high despite their differences regarding cost and benefits, economic risk, dependency on family networks and exposure to public institutions. This study further explores why this is so. If we can detect differences in their motivation toward the welfare state, it will also tell us more about the design of social policies, voting behaviour and political competition in LAC.

Since this is the first study that systematically examines welfare preferences of informal and formal sector workers as two distinguishable groups, the first objective is to compare differences and similarities in terms of the socio-economic aspects and the individual income insecurity of these labour market participants. Building on seminal political economy theories on redistribution and social policy preferences from the OECD context, it can be assumed that individual demand for public welfare and redistributive preferences are driven by several individual-level factors such as income (see Meltzer and Richard, 1981; Finseraas, 2009), insurance needs (Moene and Wallerstein, 2001; Rehm, 2009), education (Iversen and Soskice, 2001; Cusack et al., 2006), age, political ideology (Huber et al., 2006), uncertainty (Mares, 2005), ethnicity (Alesina and La Ferrara, 2005), and religion (Scheve and Stasavage, 2006). Some of these factors are considerably more relevant for formal workers than for the informally employed. A classical point of departure in political economy research on social policy preferences is economic selfinterest, referring to the famous Meltzer-Richard (MR) model (1981). From a rational choice perspective, one would expect that economic self-interest plays a more fundamental role for informal wage earners because they have the opportunity to free-ride on certain public welfare goods that are non-contributory in nature. However, as Dion and Birchfield (2010) have demonstrated, economic self-interest matters less in low- and middle-income countries compared to advanced industrial states. I address this crucial finding by adjusting the level of analysis to the individual's labour market status, testing if this more fine-grained analytical framework will tell us more about the impact following from economic self-interest in the setting of low- and middle-income democracies. How economic self-interest translates into social policy preferences also depends on the contexts in which individuals live. If informals face higher vulnerability, as case study evidence and statistics suggest (Perry et al., 2007), an increasingly insecure environment illustrated by higher unemployment rates should further stimulate their welfare demand more strongly than the formals' demand, when the concept of insiderness is applicable to the latter. Alternatively, informals might rely on "private risk management strategies" (see Perry et al. 2007, 181) to cushion shocks from adverse life events such as unemployment, sickness and age so that they turn less toward the state in times of need.

To test the theoretical framework, I analyse social policy preferences based on pooled survey data from the Latin American Public Opinion Project (LAPOP, 2012) 2008 and 2010 with hierarchical modelling techniques. I demonstrate first that informal workers are

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significantly more likely to be at economic risk than their formal counterparts. However, formals and informals are not decisively polarized in their social policy preferences. Informals do not have exaggerated social policy expectations. Finally, the analysis reveals that in contrast to the expectations from a rational choice rationale, informal sector workers are not mainly driven by short-term economic self-interest. Also an increased economic insecure environment reflected by higher unemployment rates does not exceptionally motivate informals to turn towards the state for welfare provision.

The remainder of the paper proceeds as follows. The next section introduces the theoretical framework by drawing attention to the concept of informality, discussing the welfare state in LAC, and then elaborates on the preference structure of formal and informal wage earners. Subsequently, descriptive statistics of key socio-demographic characteristics of the two labour market groups are presented. The empirical strategy, data structure and the model are then explained followed by a discussion of the argument using findings from the hierarchical analysis. The last section sets out the conclusions.

#### 3.2 Theoretical framework

#### 3.2.1 Informal workers

According to Portes and Hoffman (2003) the informal sector presents one of the largest groups in the Latin American class structure which is also politically active (see Thornton, 2000) despite the possible lack of collective action capacity (Tanaka, 2010). The academic debate has produced several definitions of the informal economy, starting from Hart (1973) who defines informality by the labour market status of self-employment, to more fine grained definitions that include the regulatory framework (see Gerxhani, 2004, 269; the author provides a very encompassing review on the empirical and theoretical literature on the informal sector and its definition). The International Labour Organization (ILO) classifies informal wage earners as those who are "not recognized or protected under the legal and regulatory framework" and who face "a high degree of vulnerability" with regard to job security, representation, or property rights (ILO 2002, 3). However, cross-country data does not allow us so far to apply this very demanding definition of informal labour.

Ideally, we would identify informal workers by the degree of vulnerability to which they are exposed to and the possession of a legal working contract – information that is not enquired in the LAPOP survey. Therefore, I concentrate the analysis on individuals who indicate self-employment on the one hand, going back to Hart's (1973) definition and more recent work of Loayza and Rigolini (2011), and, on the other hand, on self-employed individuals who also lack at the same time health care insurance from an employer (for a further discussion see the section *Empirical Setup*).

Informal workers present a very heterogeneous group of individuals. Even though a large part belongs to the low income group, some informal workers also have above average income as descriptive statistics below show. But because of their extra-legal status in the economy they face higher risks and vulnerability since they cannot legally enforce contracts. Employment-related protection such as unemployment insurance or severance pay is practically non-existent for informals. There are no long-term perspectives regarding the employment situation; consequently, they are much more exposed to risk. Nevertheless, despite lower levels of social protection for informal workers, Perry et al. (2007, 181) point out that informal workers also pursue "private risk management strategies" such as relying on family networks to 'insure' themselves against hardship, even though these strategies, such as withdrawing children from school to use their additional workforce to support the household income, leads to economic setbacks in the long run. The analysis below seeks to explain first whether informals perceive their status as risk prone, and second, whether they turn towards the state in times of need or whether they rather withdraw from the state turning towards private insurance options.

The proposed model below is a simplified and static version. Transition between formal and informal sector and dual-employment in both informal and formal sectors are not specified because of a lack of information in the survey, even though this may be relevant for the empirical investigation and theoretical considerations. Formal and informal employment is permeable in Latin America and the Caribbean (Schneider and Karcher, 2010). Workers in LAC are able to switch between formal and informal employment over their life cycle. When formal workers assume an imminent switch to informal working is highly likely, homogenized preferences can be expected. But the recent World Bank study of de la Torre et al. (2012) also points out that the labour markets in Latin America are becoming muss less volatile in recent years. Individuals have longer job durations. As the data does not allow us to identify 'swing'-workers, labour market status of the respondents at one particular point in time is measured which needs to be kept in mind for theoretical and empirical implications.

A further aspect that needs consideration is the path that leads to informal employment. It is likely that the reasons for informalization also influence social policy preferences (Saavedra and Tommasi, 2007). Tax evasion and discontent with public services might be motives for 'going underground' (Torgler, 2005) but this is probably only the case for informals who have the means to make such a free choice about the sector of employment. I assume these reasons have lower priority than motives such as survival when considering the entire group of informals. As we still know very little about the determinants for entering the informal sector (Gerxhani, 2004), I leave this for future research and focus on social policy preferences of the informally employed independently of their motives for informalization.

#### 3.2.2 The welfare system in Latin America and the Caribbean

A brief overview on the welfare systems in Latin America and the Caribbean is needed to embed the theoretical framework into context. Taking into account the debate on policy feedback, the level of welfare provision is influential for preference formation and vice versa (e. g. Brooks and Manza, 2007). Welfare systems in LAC are quite regressive in nature (cf. Lindert et al., 2006). This increases the chances of a reversed Robin-Hood effect, which is seemingly influential for preference formation. Social policy preferences are affected by the status quo of the welfare system and also the type of social services. However, no comprehensive data so far exists on the degree of universalism of welfare policies or the level of regressivity across LAC countries, despite recent efforts to classify LAC welfare states according to a regime typology (see Pribble, 2011; Barrientos, 2009), so that I rely on welfare expenditure data for the empirical analysis. Welfare policy in Latin America started with the development of social security contributions (Haggard and Kaufman, 2008), particularly in regard to pension systems, so social security contributions still make up a large share of welfare effort. Figure 3.1 gives an overview of expenditures on education, health care and social security by country (CEPAL data from 2008; (CEPAL, 2012)) and how they relate to welfare demand.





The welfare system in LAC is frequently labelled as "truncated" (or "hyphenated", meaning also formal employment has become less protected in recent times, see Barrientos (2009)) because benefits and social protection schemes are often based on formal employment, manifesting in a gap between formal and informal workers. Social security follows the Bismarckian style in most Latin American countries; benefits are linked to contributions. However, in order to respond to the problem of coverage, most states in LAC introduced during the recent decades social assistance programs such as Conditional Cash Transfers (CCT), which provide non-contributory social services for the poor, supporting them with health care and education (Lindert et al., 2006). CCTs are more progressive in nature than social security programs and they also reach the informal 80 Chapter 3 Labour Market Stratification and Social Policy in Latin America

labour force.

#### 3.2.3 Economic self-interest and economic uncertainty

State-led welfare provision and redistribution aim at treating social risks. Individual preferences on the scope and size of welfare provision depend on the individual's status in the economy (Rehm, 2009). The dependent variable concerning approval for increased state-led welfare provision is conceptually not equal to preferences for redistribution; I therefore treat both concepts separately. Redistribution creates winners and losers as it adjusts the pre-tax income structure by means of taxes and transfers so that the post-tax income distribution becomes smoother. In contrast, increased welfare spending does not necessarily redistribute income between different households, as different forms of taxes (e. g. property tax, corporate tax etc.) or revenue from natural resources can also finance an increase in welfare spending. Both variables capture a central dimension of social policy, welfare demand being more directed at individual well-being while redistribution also addresses equity in the distribution of income. Redistribution is a focal tool of the state to reduce income inequality (Meltzer and Richard, 1981), which is why it is appealing for low- and middle-income groups (as long as the median income is below the mean, regarding the middle-income group). However, redistribution also creates insurance by providing employment-related social services such as unemployment compensation, employee leave benefits, or occupational disability insurance. Hence, the need for insurance can be as equally important as pure monetary cost-benefit calculations (Moene and Wallerstein, 2001).

Following the canonical insights from political economy theory, economic self-interest should be the main driver for social policy preferences. Economic self-interest attributes to the individual's "economic utility" (Dion and Birchfield 2010, 317) that follows from public policies, which influence the amount of post-tax income. Hence, income at the household or individual level is the common measure to proxy economic self-interest (e. g. Corneo and Grüner, 2002; Finseraas, 2009, but less explicitly), next to the level of education, as in (Dion and Birchfield, 2010), which is strongly correlated to income. Higher education therefore usually reduces preferences for redistribution when short term

gains dominate the rationale. Individuals are considered to be rational actors in this school of thought (e. g. Corneo and Grüner, 2002). Drawing upon the classical median voter theorem of Meltzer and Richard (1981) (MR model hereafter), the low-income formal wage earners favour a larger welfare state as they are its direct beneficiaries. Preferences for redistribution should decrease with increasing income. The middle-income group is somewhat more difficult to classify as its redistributive preference depends on the distance between mean and median income. Because of the high rate of income inequality in LAC, one can assume that the middle-income group is closer to the low-income group, so that they would also favour increased welfare provision and greater redistribution, not only to reduce income differences but also to provide insurance against hardship. In contrast, following this reasoning, informal sector workers are mainly interested in increased welfare provision and redistribution across all income groups as it comes at no cost to them. They benefit by "free-riding" on public welfare goods or specific welfare non-employment related programs such as Conditional Cash Transfers (CCT). A further example is support for the elderly which is provided by means of CCTs that are non-contributory in nature and targeted towards the poor and needy (Barrientos, 2006). Social assistance programs (among which CCTs can be subsumed) reach a very high coverage among informal workers according to Lindert et al. (2006). Assuming that informals are at greater risk because of a lack of legal contracts and means to enforce rights (e. g. demand employment related insurance such as severance pay when laid off) one can assume that informal sector workers have a greater demand for insurance and welfare benefits (e. g. health care, schooling etc.) than formal sector workers. In general, informal wage earners' welfare demand and redistributive preferences should outperform formal workers' social preferences for welfare provision when considering both the cost-benefit ratio and the actual need for benefits and insurance.

# H 1 Demand for welfare provision and redistribution is higher among informal workers.

Subsequently, disaggregating social policy preferences by income group and following the MR rationale, I propose the following hypothesis:

# H 2 Low- and middle-income increases demand for welfare and fosters a positive attitude toward redistribution of both formal and informal workers. The income effect should be stronger for informal workers.

An exaggerated welfare demand would, however, contradict the MR model which sees individuals not just as utility maximizers but also as welfare maximizers. Accordingly, an exaggerated demand that harms the entire welfare system should not exist¹, particularly with regard to formal workers' preferences.

Next to the important role of income for social policy preferences, a second branch of research advocates the explanatory power of risk exposure for preference formation (Rehm, 2009; Cusack et al., 2006). Self-interest reflects a short-term perspective whereas insurance needs illustrates a more forward looking perspective that factors in future risks. Insurance need should outweigh short-term self-interest when the prime objective is not economic self-interest to maximize personal wealth by free riding on public welfare goods. If insurance need is the main driver of the social policy preferences of informal wage earners, demand for public welfare and also for redistribution should remain high. Hence, we need to test first whether informal workers also perceive their own economic situation as more volatile compared to formals. If informal workers also perceive their economic situation as more risk prone, we can expect them to have a higher demand for welfare and redistribution. The more risky the environment, the higher is the need for insurance via welfare provision and redistribution. A simple indicator for risk exposure is the unemployment rate as it increases pressure on the labour market because labour becomes more abundant. Such a development can put informals at increased risk compared to formals because informal workers lack any forms of formal labour protection in terms of employment contracts and can therefore be laid off easily. Increasing problem pressure should induce higher demand for welfare provision and redistribution of both groups, but most strongly for informals who are more exposed to risk.

¹Flaws in the MR model have been abundantly discussed in political economy research, relating to the macro mechanism of income inequality and welfare spending (cf. Kenworthy and McCall, 2008). But the relevance of income, among other factors, for preference formation has so far been supported in the literature (see Corneo and Grüner, 2002; Finseraas, 2009).

 H 3 A more economically insecure environment increases welfare demand and preferences for redistribution. The effect should be stronger for informal workers.

#### 3.2.4 Socio-economic differences and similarities

In order to unpack social policy preferences of formal and informal workers in LAC, I start with descriptive statistics on income, political orientation and level of education of the two labour market groups. As Figure 3.2 illustrates, and as the comprehensive study of the World Bank researchers Perry et al. (2007) also suggest, the income distribution of informal wage earners is much more skewed towards the lower ends compared to their formal counterparts. While the income distribution in LAC is already highly unequal (De Ferranti et al. 2004) a further divide is established within the labour market, distinguishing formals and informals by the level of income.



Figure 3.2 Income distribution in deciles by labour market group

The average informal worker is situated in the 4th decile; the average formal worker is located in the 5th. However, the distribution also demonstrates the heterogeneity of the group of informal workers. Besides the tendency toward lower earnings, some informal workers also have above average income. However, it has to be noted that these general statistics disguise variation in the income distribution of the groups across countries.





Moving toward political orientation of the two labour market components, things become more diverse. Respondents are asked to place themselves on the left-right scale with regard to their political orientation (1 meaning left, 10 referring to the right). Individuals in LAC use the classical left-right scale to express their political orientation (see Wiesehomeier and Doyle 2012 on the left-right dimension in LA; Harbers et al. 2012 on self-placement on left-right scale in LA) even though there is variation in the meaning that individuals apply to the left-right semantic (Zechmeister, 2006). There is a general tendency to cluster in the centre of the ideological spectrum in Latin America so that high values for the centre are not surprising. Keeping the OECD literature on insider-outsider politics in mind (e. g. Rueda, 2005, 2006) one could expect that informals tend further to the left as left parties might increase the level of welfare services. But this also depends



Figure 3.4 Self-placement on party ideology scale of *formal* workers by country in percentages

on the party strategies of left parties which can also include incentives to promote the status of insiders only (see Rueda, 2005; Häusermann and Schwander, 2012). Right wing parties could be also very appealing to outsiders as they usually pursue a deregulation of the labour market that in the following facilitates access to formal employment for informals. I display the distribution of political orientation grouped into the categories left, centre and right² for informals Figure 3.3 and formals Figure 3.4 by country to take into account variations in the party systems and incumbent governments. Formals do not have a stronger left wing political orientation (which presumably fosters their insider status) nor do informals generally place themselves on the one end of the spectrum.

Last, I contrast formal and informal workers' level of education. As Perry et al. (2007) emphasizes, informal sector workers are largely more disadvantaged in terms of chances to gain education. But governments in LAC also increased their efforts to invest

 $^{^{2}}$ Values from 1 to 3 are coded as left, 4 to 7 illustrates a centre preference and values from 8 to 10 represent a right wing party preference. The approach is conservative, creating a larger category for the centre so that left and right capture slightly more extreme positions.

in education and therefore human capital development by means of social assistance programs such as CCTs, that are non-contributory in nature. Descriptive statistics in Figure 3.5 confirm expectations that the distribution is more left skewed for formal wage earners and right skewed for informals. To sum up, informal workers are on average poorer and have lower levels of education compared to formal workers. Political ideology does not follow a clear group distinction but varies by country. According to these results one could expect that informal workers have a greater demand for welfare and redistribution because their status in the economy appears to be more risk prone.



Figure 3.5 Years of education by labour market group

#### 3.2.5 The formal–informal preference differential

Finally, I illustrate descriptive statistics on welfare preferences, the dependent variable, of the two groups to show the degree of polarization. I use the LAPOP item ROS2 to measure preferences for public welfare: "The [...] government, more than individuals, is the most responsible for ensuring the well-being of the people", asking to what extent the respondent agrees or disagrees. The item ROS4 reflects preferences for redistribution:

"The [...] government should implement firm policies to reduce income inequality between the rich and the poor". The scale ranges from 1 to 7, with lower values signaling lowest levels of welfare demand or support. The first item reflects the respondent's demand for the state to support the well-being of society. The second item illustrates redistributive preferences, as income redistribution by the state is the primary means to address income inequality. Arguably, welfare demand and redistributive preferences might not be comparable across countries due to a different status quo to which the survey items do not refer. This is a valid concern but the hierarchical model allows the intercept to vary according to country and the model also controls for welfare state effort (as robustness test) reducing the risk of non-comparability. The graphs (Figures 3.6 and 3.7) show averages for the survey items 'demand for state-led welfare provision' and preferences for redistribution'.



Figure 3.6 Welfare demand by labour market group and country

Given differences in welfare state costs and benefits for both labour market groups, it is surprising that the preference differential between formals and informals is low as can be seen in Figures 3.6 and 3.7. However, it varies by country. Informal sector workers (grey bars) have a marginally lower demand for public welfare provision in countries such as Chile, Suriname, Colombia, Brazil, Guatemala, and El Salvador, while their demand is higher compared to the formal worker groups' (black bars) in Uruguay, Paraguay, Haiti,



Figure 3.7 Preferences for redistribution by labour market group and country

Costa Rica, and Nicaragua. From the descriptive statistics one cannot depict any pattern with regard to welfare regimes in these countries. According to Huber and Stephens (2012), Argentina, Brazil, Chile, Costa Rica and Uruguay have the most developed welfare systems. But social policy preferences are not lower in these countries nor the demand from informals constantly higher. The next section tests whether these apparent findings also hold in a regression framework.

#### 3.3 Empirical strategy – variable description and model specification

I start with a hierarchical varying intercept varying slope model with pooled survey data from the Latin American Public Opinion Project  $(LAPOP)^3$  conducted in 24 Latin American and Caribbean countries in 2008 and 2010. I use a hierarchical model because individuals are nested in countries and observations therefore lack independence. The hierarchical model also effectively manages to deal with different groups sizes, which is the case in the sample used here. Furthermore, a part of the research agenda is based on

³LAPOP conducted the survey in the following 24 countries: Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Colombia, Ecuador, Bolivia, Peru, Paraguay, Chile, Uruguay, Brazil, Venezuela, Argentina, Dominican Republic, Haiti, Jamaica, Guyana, Trinidad and Tobago, Belize, and Suriname. Due to the absence of data at both macro and micro levels, Guyana, Trinidad and Tobago (no party ideology), Haiti, and Suriname (no unemployment rate) drop out of the sample in the analysis of social policy preferences so that N Level 2 = 20 (Tables 2-4).

the understanding of contextual effects on social policy preferences. I use the survey from the years 2008 and 2010 because these two waves contain the items used to operationalize the dependent variables. The dataset also allows using survey weights at the individual level. Regarding case selection, only those years for a country are included that are classified as 5 or higher at Marshall's Polity IV scale (Marshall et al., 2010), so that only democracies are part of the sample. I relax the recommendation of Marshall et al. (2010) to use a threshold value of +6 due to data constraints⁴. Only democracies are considered because the logic of redistributive preferences does not apply in the same way to authoritarian states. First, I test whether informal workers are at greater economic risk than formal wage earners using economic risk as dependent variable. Next, turning towards the analysis of social policy preferences, I examine whether labour market status significantly influences social policy preferences in a regression model. Finally, I contrast social policy preferences of the two groups, studying the factors that drive their preference formation.

#### 3.3.1 Explanatory variables

Measuring informal employment is a delicate matter due to the clandestine nature of informality. Schneider and Enste (2000) review different measures of the informal economy, emphasizing the difficulty of the endeavour and showing that one cannot declare one method as superior to the others. To identify informal wage earners in the survey, I rely on the item OCUP1A which asks respondents the type of occupation they pursue. I follow the identification strategy of the World Bank researchers Loayza and Rigolini (2011), who have contributed seminal insights to the study of the informal economy (see also Loayza, 1996), using the survey category 'self-employed' to indicate informal employment and I add an additional restriction based on the possession of employment related health insurance. Arguably, self-employment is an incomplete measure as Loayza and Rigolini (2011, 1508) intensively discuss. Informals who are salaried employees are not considered. But they also point out that "in most countries there is a strong association between self-

⁴The survey year 2010 for Venezuela is excluded since the country was ranked -3 on the Polity IV scale, i.e. it was not democratic. Ecuador is on the verge of still being considered as democratic with a Polity IV value of 5. I include Ecuador in the analysis as observations at level two are needed.

employment and informal activity, as most self-employed workers tend to be low-skilled and unregistered workers" (Loayza and Rigolini 2011, 1508). Furthermore, the authors run several robustness tests to scrutinize the reliability of this measure, coming to a positive conclusion. The other categories of the item OCUP1A among which the respondent can choose are public employee, private employee, "owner or partner in a business" or "unpaid worker" (LAPOP, OCUP1A). Hence, we can assume that professionals choose the category 'owner or partner in a business' when they run their own company in the formal economy rather than choosing the category 'self-employed'. However, in order to increase the reliability of the measure I classify only those respondents as informal who are not only self-employed but also lack health insurance⁵. Only formal workers have occupation-based insurance (see Perry et al., 2007). Working individuals who indicate having health insurance are coded as formal workers. I exclude all respondents from the sample that are non-employed (e. g. housewives, students, retirees) to fully concentrate the analysis on formal and informal wage earners. Economic self-interest is proxied by household income. The survey item Q10 measures income deciles by indicating fixed income ranges to the respondent. I create income dummies for the low-, middle-, and high-income group (reference category: high income). The low-income group is coded from no income to the forth decile, the middle-income group ranges from the fifths' to the sevenths' while the eights' to tenths decile represents the high-income group. Categories are not equal in size, the low-income category containing more income deciles. This conservative approach is chosen in order to capture only the very rich in the highest category, and to include only the sound middle-income workers in the middle-income category, given the skewed income distribution in Latin America. Economic insecurity is measured with the question of whether individuals have sufficient salary to make savings or whether it is insufficient and afflicting the respondent on a 1 to 4 range (LAPOP Q10D). I recode the variable to a dummy with 1 (values 3-4) reflecting a perception of the economic situation as troubling and 0 (values 1-2) that the salary is sufficient to make savings. In order to capture insecurity and problem pressure at the context

 $^{^{5}}$ The health care insurance question differs in the 2010 survey (SAL2). The respondent indicates whether she has a health insurance plan through social security, through the government, or a private plan or both (coded as 1 for having health insurance).

level, I use the unemployment rate (World Bank, World Development Indicators (WDI) 2012*a*). Becoming unemployed means an immediate income loss and thus presents a serious threat (see Rehm 2009, 863). As discussed above, increasing unemployment leads to an abundance of labour. Especially when unemployment rates among the low skilled individuals rises, costs of labour declines because wages can be lowered. Hence, the employment situation of informals can become particularly precarious.

#### 3.3.2 Control variables

At the micro level I control for a set of socio-demographic variables that have become common in studies on social policy preferences. Among these are gender (female), age, number of children, education (years of schooling), political ideology and religiosity (on the latter see Scheve and Stasavage (2006) and De La O and Rodden (2008)). I also include control variables at the macro level. However, as there are only 20 observations at country level, the number of degrees of freedom is considerably small so that the number of parameters at the macro level is highly  $limited^{6}$ . The scope of the welfare state has to be factored in when studying social policy preferences as discussed above⁷. I therefore include information on social spending per capita provided by CEPAL (2012). Also the level of income inequality needs consideration to pay credit to the literature that studies redistributive preferences (e. g. Finseraas, 2009; Busemeyer, 2013, for the OECD context). However, it has to be noted that the impact of inequality is somewhat ambiguous in Latin America as Cramer and Kaufman (2011) have pointed out. The poor become more tolerant toward unequal income distribution in contexts of greater inequality (2011, 22). I add a measure of the gini coefficient provided by Solt (2009). But because of increased multicollinearity between the measures social spending and income inequality, I include the two variables separately, pursuing a more conservative approach.

 $^{^{6}}$ A variable for the survey year 2010 is has been added to test whether the time period of the survey affects the outcome variable. As the variable is not significant in all models it is dropped to save degrees of freedoms at level two.

⁷Additional robustness on further macro controls tests have been made. I also test in how far the institutional framework of the state influences social policy preferences of formal and informal workers in order to take into account the distributive capacity of the state that is likely to influence welfare preferences (see Mares, 2005; Rothstein, 2011). Results can be found in Table C, *Supplementary Material*. The effect is similar for both labor market groups. The better the institutional quality the higher is the preference for redistribution.

Several observations are missing because some items are not asked in some countries (e.g. political orientation) and lower response rates on some items (see fn. 3). An overview of the variables used in the models can be found in Table A (Appendix).

#### 3.3.3 Model specification

As Steenbergen and Jones (2002) emphasize, to receive correct standard errors requires the hierarchical model due to the nested structure of the data. The intercept is not constrained so that it may vary according to country. Furthermore, I let the labour status informal worker vary by country as random slope. The theoretical framework proposes in H1 that welfare demand and redistributive preferences of formals and informals depend on their status in the respective economy involving differences in access to welfare benefits and exposure to risk, so that a varying intercept varying slope model needs to be applied. I relax the assumption of a latent variable structure, resulting from the categorical structure of the dependent variables, by using a linear model and treating y as a continuous variable to reduce complexity⁸. In accordance with Gelman and Hill (2007), the varying intercept varying slope equation is specified as follows⁹ (for i= 1,... N (individuals) and j= 1,...J (countries)):

$$y_i = \alpha_j + \beta_1 \operatorname{Income}_i + \beta_2 X_i + \beta_j \operatorname{Informal}_{ji} + \epsilon_i$$

 $\alpha_i = \beta_0 + \beta_1 \text{Unemployment Rate}_j + \beta_2 \text{U}_j + \eta_j$ 

 $\beta_i = \gamma_0 + \gamma_1 \text{Informal}_i + \eta_i$ 

$$\eta_j \sim N(0, \sigma_\eta)$$

⁸To test the robustness of the findings, I use a more conservative approach of applying a hierarchical ordered probit model, which takes into account the categorical structure of the dependent variables (DVs). The DVs range on a scale from 1 to 7 but the distance between the categories are not necessarily equal (Long 1997). Findings for the ordered probit model (estimated with the gllamm command in STATA 12.1) for the variables of interest do not strikingly deviate from the findings presented above, so that the more intuitive model is chosen for the presentation of results. The estimation table is displayed in the *Supplementary Material* section, Table A.

⁹As the DV for economic insecurity is a dichotomous variable, a logistic hierarchical varying intercept varying slope regression will be applied in the section *Economic insecurity* before I proceed with the linear model in the main part of the analysis.
The vector X includes a set of individual level predictors as discussed in the *Control* variables section and U represents macro level controls. I grandmean standardize variables in the model to enable reasonable comparisons between the models (cf. Gelman and Hill, 2007). The intra-class coefficient (ICC)  $\rho$  for the two DVs is  $\rho_{DV_welfare} = 0.06$ and  $\rho_{DV_redist.} = 0.09$ . Since most variation in individual level attitudes is explained by individual level factors, the relatively low values are not surprising.

#### 3.4 Results

#### 3.4.1 Economic insecurity: Who is at risk?

In the OECD literature, outsiders are defined by the level of vulnerability and uncertainty that this labor market group encounters (Häusermann and Schwander, 2012). These two features 'travel' well to informal wage earners in low- and middle-income economies, because informal employment lacks legal means to enforce contracts and liabilities so that transaction costs are considerably higher for informal workers compared to their formal counterparts (see Feige, 1990; Burgoon and Dekker, 2010). Burgoon and Dekker (2010) demonstrate that flexible employment increases job and income insecurity at the individual level in advanced industrial democracies (see Cusack et al., 2006). If informal employment resembles this understanding of labour market outsiderness, then we should also find higher income insecurity of informal workers. Controlling for the usual suspects of gender, age, income, and education in a hierarchical varying intercept varying slope logistic regression (the DV is a dummy variable), I find a significant higher likelihood to perceive higher income insecurity for informal workers (see Table 1).

I illustrate the average marginal effect of labor market status as predicted probabilities of perceiving the personal income situation as insecure in Figure 3.8. Informal workers have a probability of 54% of evaluating the personal income situation as precarious, while the likelihood is significantly lower for formal workers (approximately 43%) at the 0.1% level of significance. Nevertheless, even though informals have a significantly higher probability of economic insecurity, the likelihood for formal sector workers is also not negligible, demonstrating the generally high labour market risks for both groups.

	M 1
	Economic Insecurity
informal worker	0.446***
	(0.068)
female	0.236***
	(0.029)
age	0.019
0	(0.017)
education	-0.539***
	(0.016)
constant	-0.284***
	(0.082)
Random Effect	ts Parameters
var (informal)	0.083
	(0.032)
var (constant)	0.150
	(0.048)
N Level 1	25100
N Level 2	24
Wald $Chi^2$	1415.71
Log-Likelihood	-15973.11
BIC	32017.1
Standard errors in p	parentheses
Source: LAPOP 20	08, 2010;

Table 1 Logistical hierarchical varying intercept varying slope model: Economic insecurity

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

#### 3.4.2 The influence of labour market status on social policy preferences

Having shown that perceiving the income situation as vulnerable is significantly higher for informals compared to formals I test whether being either an informal or formal worker significantly varies social policy preferences on a country by country basis testing H1. I use a hierarchical varying intercept varying slope model, allowing the variable formal worker and the variable informal worker to vary according to country (in separate models). The average variances of the random effects (for formal and informal worker) and also the coefficients are however insignificant for welfare demand and redistributive preferences so



Figure 3.8 Predicted probabilities for DV insecure economic situation (95% CI)

that labour market status does not significantly affect social policy preferences, refuting hypothesis 1. The Likelihood-Ratio test, which tests if a random slope for labour market status needs to be applied, is not significant for both DVs¹⁰, there is no significant variation between countries. Despite greater risk exposure and possibilities for informals to benefit from public welfare goods that come at much lower costs to them regarding the lack of income taxation, informals do not turn more strongly towards the state for the provision of welfare benefits. Instead of displaying the regression table (see Table B in *Supplementary Material*) I show the finding graphically by displaying the random slopes for labour market status for the DV redistributive preferences where small variation of the random slope, though not significant, can be visualized (for the DV welfare demand variances are almost zero). Figure 3.9 and 3.10 uses exact estimates for each country for the fully specified model¹¹. The figures show that the effect of being either an informal (a) or formal wage earner (b) does not significantly affect redistributive preferences (with 95% confidence intervals).

The lack of social policy polarization between the two labour market groups might

¹⁰The varying intercept model outperforms the more complex varying intercept varying slope model. ¹¹The model is based on 20 countries and follows the same specification as in the models shown in Table 2 with an additional random slope for informal worker (formal respectively, tested in separate models). Estimations tables are displayed in the *Supplementary Material* section, Table B.



Figure 3.9 Random slope of informal worker on preferences for redistribution

Figure 3.10 Random slope of formal worker on preferences for redistribution



be explained by the growing precariousness of both groups in Latin America. Reforms of the welfare state in the 1990's and the focus on liberalization, as Barrientos (2009, 96) emphasizes, have "eroded the premium attached to formal employment" to some extent so that formals and informals have moved closer together. Consequently, we need to ask if formals and informals are also motivated by the same factors in their social policy preferences. The following section addresses the black box of preference formation among the formally and informally employed, unpacking the factors that drive social policy preferences of each group separately. The next section proceeds with a simpler varying intercept model for each labour market group to test whether social policy preferences are determined by different factors as proposed in hypotheses 2 and 3.

#### 3.4.3 Social policy preferences of formal and informal sector workers

In order to examine social policy preferences of formal and informal sector workers I contrast determinants for welfare demand and redistributive preferences by labour market status. The results are illustrated in Table 2. The positive impact from low-income and middle-income earners on preferences for redistribution is only observable for the formally employed, contrary to the theoretical expectations expressed in H2. Being in the lower and middle income category fuels formal workers' demand for welfare provision and redistribution, supporting the Meltzer-Richard rationale (keeping high rates of income inequality in LAC in mind). However, even though informal workers are more likely to belong to lower income groups and to be exposed to greater need compared to formal workers, low income is not a driver of their social policy preferences in contrast to formal sector workers.

	(M 2)	(M 3)	(M 4)	(M 5)
	Formal Worker	Informal Worker	Formal Worker	Informal Worker
	Welfare Demand	Welfare Demand	Redistribution	Redistribution
Micro Predictors				
low income	0.121	0.038	0.143*	0.124
	(0.103)	(0.088)	(0.058)	(0.087)
middle income	0.147 +	0.009	0.166***	0.028
(ref: high income)	(0.076)	(0.082)	(0.034)	(0.076)
education	-0.023	0.067 +	-0.002	0.094**
	(0.025)	(0.038)	(0.014)	(0.030)
female	-0.022	-0.121**	0.022	-0.051
	(0.034)	(0.043)	(0.027)	(0.050)
age	0.021	0.037	0.004	-0.005
	(0.022)	(0.029)	(0.027)	(0.030)
children	0.050+	0.031	0.041	0.037 +
	(0.027)	(0.024)	(0.027)	(0.021)
religious	-0.033	-0.054*	-0.025	-0.058*
-	(0.023)	(0.022)	(0.027)	(0.027)
left ideology	0.057	-0.103	0.254**	0.001

Table 2: Hierarchical varying intercept model by labour market status

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	(0.082)	(0.082)	(0.093)	(0.090)
centre ideology	-0.106	-0.271**	-0.058	-0.248**
(ref: right ideology)	(0.085)	(0.088)	(0.078)	(0.089)
Macro Predictors				
unemployment rate	$0.147^{*}$	$0.113^{*}$	$0.128^{*}$	0.086
1 0	(0.058)	(0.054)	(0.063)	(0.069)
constant	5.627***	5.846***	5.597***	5.833***
	(0.109)	(0.087)	(0.120)	(0.113)
Random Effects Par	ameters			
var (constant)	0.100	0.073	0.187	0.145
	(0.034)	(0.027)	(0.122)	(0.730)
var (residual)	2.336	2.377	2.135	2.350
	(0.093)	(0.100)	(0.110)	(0.119)
N Level 1	10458	8477	10458	8477
N Level 2	20	20	20	20
Wald Chi ²	72.93	143.79	105.38	63.97
Log-Likelihood	-17634.48	-13267.18	-17212.19	-13232.25
BIC	35389.3	26651.9	34544.7	26582.1

Source: LAPOP 2008, 2010; WDI (World Bank 2012) + p<0.10, * p<0.05, ** p<0.01, *** p<0.001

In contrast, model 3 displays a positive education effect for both demand for state-led welfare provision and redistributive preferences of informal workers. Higher levels of education fuel welfare demand at the 10% level of significance and for redistribution at the 1% level. Investing in higher education is more risky for informal workers because they lack legal means to enforce their rights so that their investment does not necessarily pay back. Hence, investing in education also increases informal workers' risk exposure despite greater employability with higher levels of education, and thus the positive education effect is more likely to reflect their insurance needs. The missing effect following from income levels and the positive education effect rather allude to a long-term self-interest in terms of insurance for informal sector workers when education attainment is higher. Hypothesis 2 therefore needs to be rejected regarding the expectations for informals.

Finally, left-wing ideology positively influences redistributive preferences of the formally employed, and does not affect informal workers. Religiosity has a robust negative effect on social policy preferences for informals as Table 2 shows. Religiosity might be an indicator for stronger network ties and thus, a hint toward the assumption that informal workers more strongly rely on social- and family networks and therefore turn less toward the state for welfare provision, but this claim needs further empirical investigation.

#### 3.4.4 Social policy preferences and the context of uncertainty

In the varying intercept models on the subgroup samples we can detect a positive impact from the unemployment rate on welfare demand and redistributive preferences of formal workers (Table 2). For the group of informals, a positive effect is displayed for state-led welfare provision demand. The size of the coefficient is however smaller in terms of magnitude. Higher risk exposure due to a rising unemployment rate motivates formals to turn towards the state for public welfare provision more strongly compared to informals. Greater uncertainty at a context level does not push informal workers to turn towards the state for increased redistribution (M4). Hypothesis 3 cannot be supported. Adding social spending data to the model reduces the number of observations at level 2 to 18 countries. The results remain robust at both micro and macro level as illustrated in Table 3, when social spending is included as additional control, and also as in Table 4, where the gini coefficient is added. An economically risky environment increases welfare demand of informals, but much less than expected given their risk prone status in the economy and the above found hint towards insurance needs when education is higher.

	(M 6)	(M 7)	(M 8)	(M 9)
	Formal Worker	Informal Worker	Formal Worker	Informal Worker
	Welfare Demand	Welfare Demand	Redistribution	Redistribution
Micro Predictors				
low income	0.140	0.061	$0.143^{*}$	0.122
	(0.096)	(0.089)	(0.057)	(0.091)
middle income	0.183**	0.043	0.164***	0.037
(ref: high income)	(0.069)	(0.081)	(0.036)	(0.081)
education	-0.015	0.067 +	0.006	0.098**
	(0.024)	(0.039)	(0.014)	(0.031)
female	-0.014	-0.125**	0.026	-0.026
	(0.035)	(0.044)	(0.028)	(0.047)
age	0.023	0.040	0.001	-0.004
0	(0.022)	(0.030)	(0.028)	(0.031)
children	$0.057^{*}$	0.033	0.040	0.046*
	(0.028)	(0.026)	(0.029)	(0.022)
religious	-0.040+	-0.059**	-0.033	-0.064*

Table 3: Hierarchical varying intercept model by labour market status: Social spending and unemployment rate

Continued on Next Page...

	(0.023)	(0.022)	(0.027)	(0.027)
left ideology	0.058	-0.069	0.250**	0.021
0.	(0.086)	(0.078)	(0.097)	(0.090)
centre ideology	-0.113	-0.265**	-0.070	-0.263**
(ref: right ideology)	(0.089)	(0.091)	(0.081)	(0.091)
Macro Predictors				
unemployment rate	0.132**	0.099*	$0.115^{*}$	0.072
- •	(0.051)	(0.045)	(0.057)	(0.067)
social spending	0.038	0.051	$0.131^{*}$	$0.129^{*}$
1 0	(0.064)	(0.069)	(0.051)	(0.060)
constant	5.611***	5.822***	5.684***	5.895***
	(0.096)	(0.083)	(0.094)	(0.105)
Random Effects Par	rameters			
var (constant)	0.068	0.068	0.052	0.071
	(0.026)	(0.029)	(0.028)	(0.038)
var (residual)	2.310	2.346	2.061	2.297
	(0.094)	(0.102)	(0.096)	(0.117)
N Level 1	10051	8214	10051	8214
N Level 2	18	18	18	18
Wald Chi ²	98.56	716.9	132.45	122.54
Log-Likelihood	-16834.809	-12736.582	-16313.316	-12663.466
BIC	33798.6	25599.4	32755.6	25453.1

Source: LAPOP 2008, 2010 Note: Venezuela (for 2008) and Belize drop out because of missing social spending data. + p<0.10, * p<0.05, ** p<0.01, *** p<0.001

	(M 10)	(M 11)	(M 12)	(M 13)
	Formal Worker Welfare Demand	Informal Worker Welfare Demand	Formal Worker Redistribution	Informal Worke Redistribution
Micro Predictors				
low income	0.121	0.038	$0.144^{*}$	0.124
	(0.103)	(0.088)	(0.058)	(0.087)
middle income	0.147 +	0.010	0.166***	0.028
(ref: high income)	(0.076)	(0.082)	(0.034)	(0.076)
education	-0.023	0.066+	-0.002	0.093**
	(0.025)	(0.038)	(0.014)	(0.030)
female	-0.022	-0.122**	0.022	-0.051
	(0.034)	(0.043)	(0.027)	(0.049)
age	0.021	0.037	0.004	-0.005
-	(0.022)	(0.029)	(0.027)	(0.030)
children	0.050+	0.032	0.041	0.036 +
	(0.027)	(0.024)	(0.027)	(0.022)

Table 4:	Linear	hierarchical	varying	intercept	model:	Unemployment	and In-
equality							

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	(0.023)	(0.021)	(0.027)	(0.027)
left ideology	0.057	-0.104	0.254**	0.001
	(0.082)	(0.083)	(0.093)	(0.090)
centre ideology	-0.106	-0.272**	-0.058	-0.248**
$(ref: right \ ideology)$	(0.085)	(0.088)	(0.078)	(0.089)
Macro Predictors				
unemployment rate	$0.145^{**}$	$0.095^{*}$	0.153 +	0.091
	(0.056)	(0.046)	(0.079)	(0.077)
gini	0.001	-0.060	0.100	0.022
	(0.118)	(0.091)	(0.203)	(0.170)
constant	5.627***	5.843***	5.609***	5.836***
	(0.106)	(0.086)	(0.104)	(0.107)
Random Effects Par	ameters			
var (intercept)	0.100	0.070	0.181	0.145
	(0.034)	(0.029)	(0.090)	(0.068)
var (residual)	2.336	2.377	2.135	2.350
	(0.093)	(0.100)	(0.110)	(0.119)
N Level 1	10458	8477	10458	8477
N Level 2	20	20	20	20
Wald Chi2	86.65	187.64	109.86	72.72
Log-Likelihood	-17634.48	-13266.85	-17211.79	-13232.23
BIC	35398.5	26660.3	34553.1	26591.1

Source: LAPOP 2008, 2010; World Bank 2012; Solt (2009) + p<0.10, * p<0.05, ** p<0.01, *** p<0.001

That we do not observe the expected effect according to income and risk exposure via increased unemployment for informals may be a consequence of several factors. Firstly, informal workers present a heterogeneous group involving voluntary and involuntary members who may have different interests when it comes to redistribution and the welfare state. A further disaggregation of data is needed, which is not feasible unless the appropriate individual level data is available. Second, an exaggerated demand for welfare provision and redistribution harms the welfare state in the long run. That informals might be employed in the formal labour market in the future, may explain why informal workers do not follow a utility maximizer rationale. The temporal aspect therefore also needs consideration. And third, as pointed out above, liberalization of the labour market and privatization of social services in the last two decades have undermined the privileged status of formal workers to some extent. Thus, both have a relatively high need for welfare provision. As some governments are now reverting this neoliberal reform period such as Argentina or Bolivia with regard to the pension system (Carnes and Mares, 2013),

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it will be important to observe whether we can also witness a new strengthening of the insider status of formal workers and an increase in social policy polarization.

#### 3.5 Conclusion

Labour market segmentation into formal (more secure) and informal (more vulnerable) employment is a durable phenomenon in Latin America and the Caribbean. The Latin American working population cannot be treated as homogeneous entity, and needs to be separated into its essential strata to analyse social policy preferences. Taking into account the relationship between dualized labour markets and welfare systems of the OECD context, the article explored how far labour market segmentation also leads to polarization of the two labour market groups with regard to distributive politics. Having shown that informal and formal sector workers have similar social policy and redistributive preferences that might be a consequence of the porousness of formal employment and the declining 'premium status' of formals (Barrientos, 2009), this article subsequently scrutinized the factors which determine these subgroups' preferences.

While formal wage earners are influenced by a mixture of factors that are also common to political economy theories, such as economic self-interest and left-wing ideology, what matters for informal wage earners produces a different picture. In contrast to expectations, informals are not driven by short-term economic self-interested, reflected by income. The study shows that informal workers are not exceptionally motivated by economic utility reasons that aim at pure short-term benefit accumulation. Education positively influences social policy preferences of informal workers. Keeping in mind higher costs of education for informal workers because of their vulnerable status in the economy, the positive finding might allude to insurance needs of informals with higher levels of education. But more generally, a more risky environment does not particularly encourage greater welfare expectations of the informally employed. More fine-grained analysis is needed to tackle insurance expectations of informals.

That informal workers are not exceptional in turning toward the state for benefit provision is surprising given the opportunities to benefit from public welfare goods and non-contributory welfare services. The lack of strong income-related motives for social policy support by informal workers is a crucial aspect for party competition, analysis of socio-economic cleavage structures, and the design of social policies in LAC, especially since the classical class cleavage has been on the retreat in Latin America in recent decades (Roberts, 2002). Future research needs to observe preference formation over time that takes into account switches between formal and informal labour market to fully unpack long-term perspectives of formal and informal workers.

#### 3.6 Appendix

Variable	Observations	Mean	Std. Dev.	Min.	Max.
DV					
welfare demand	25100	5.676	1.570	1	7
redistribution	25100	5.787	1.548	1	7
economic insecurity	25100	0.471	0.499	0	1
low income	25100	0.344	0.475	0	1
middle income	25100	0.513	0.500	0	1
high income	25100	0.134	0.341	0	1
informal worker	25100	0.447	0.497	0	1
female	25100	0.353	0.478	0	1
age	25100	38.980	12.845	16	98
children	25100	2.299	2.102	0	23
married	25100	0.646	0.478	0	1
education	25100	9.979	4.453	0	18
religious	25100	3.025	1.355	1	5
party ideology	19462	2.043	0.644	1	3
unemployment rate	24228	7.098	3.442	2.5	20.6
social spending per capita	22742	655.998	522.025	120	1770
gini	25100	48.335	3.513	37.620	53.313
Year10	25100	0.577	0.494	0	1

 Table A Table A Descriptive statistics

Source: LAPOP 2008, 2010; World Bank WDI (2012); CEPAL (2012); Solt (2009)

#### Supplementary Material 3.7

status				
	(M 10)	(M 11)	(M 12)	(M 13)
	Formal Worker	Informal Worker	Formal Worker	Informal Worker
	Welfare Demand	Welfare Demand	Redistribution	Redistribution
Micro Predictors				
low income	0.056	-0.004	$0.116^{**}$	0.066
	(0.038)	(0.053)	(0.038)	(0.053)
middle income	0.078**	-0.007	$0.135^{***}$	0.023
(ref: high income)	(0.030)	(0.051)	(0.030)	(0.052)
education	-0.016	0.061***	0.001	0.069***
	(0.013)	(0.014)	(0.014)	(0.014)
female	-0.030	-0.108***	0.000	-0.057*
	(0.023)	(0.026)	(0.023)	(0.026)
age	0.021	0.034*	0.016	0.006
	(0.017)	(0.017)	(0.017)	(0.017)
children	$0.020^{*}$	0.011 +	0.014 +	0.013*
chindroni	(0.008)	(0.007)	(0.008)	(0.007)
married	-0.028	-0.021	-0.004	0.000
	(0.024)	(0.027)	(0.025)	(0.027)
left ideology	0.080***	-0.026	$0.171^{***}$	0.029
	(0.022)	(0.024)	(0.022)	(0.024)
Macro Predictors unemployment rate	0.126 +	0.103 +	0.121 +	0.082
unemployment rate	(0.066)	(0.061)	(0.064)	(0.062)
Random Effects Pa		(0.001)	(0.001)	(0.002)
var (constant)	0.059	0.049	0.118	0.126
	(0.020)	(0.017)	(0.034)	(0.025)
cut 1	-1.825***	-2.140***	-1.820***	-2.008***
	(0.069)	(0.078)	(0.057)	(0.075)
cut 2	-1.561***	-1.781***	$-1.572^{***}$	-1.688***
	(0.068)	(0.076)	(0.055)	(0.073)
cut 3	-1.204***	-1.334***	-1.242***	-1.319***
	(0.067)	(0.075)	(0.054)	(0.072)
cut 4	-0.752***	-0.874***	-0.785***	-0.873***
	(0.066)	(0.074)	(0.053)	(0.072)
cut 5	-0.270***	-0.395***	-0.323***	-0.411***
	(0.066)	(0.074)	(0.053)	(0.071)
cut 6	0.284***	0.148*	0.215***	0.117
	(0.066)	(0.074)	(0.052)	(0.071)
N Level 1	10458	8477	10458	8477
N Level 2	20	20	20	20
Log-Likelihood	-15924.91	-13384.62	-15002.85	-12933.01
BIC	31997.9	26914.0	30153.8	26010.7

Table A: Hierarchical ordered probit varying intercept model by labour market status

	(M 1) Welfare Demand	(M 2) Redistribution
Micro Predictors		
informal worker	-0.016	-0.015
	(0.026)	(0.027)
low income	0.121**	0.178***
	(0.041)	(0.040)
middle income	0.124***	0.166***
(ref: high income)	(0.035)	(0.035)
education	0.036**	0.048***
	(0.014)	(0.013)
female	-0.080***	-0.024
	(0.024)	(0.024)
age	0.027	-0.001
	(0.016)	(0.016)
children	0.039**	$0.037^{*}$
	(0.015)	(0.015)
religious	-0.041***	-0.044***
	(0.012)	(0.012)
left ideology	0.014	0.161***
	(0.035)	(0.035)
centre ideology	-0.193***	-0.140***
(ref: right ideology)	(0.028)	(0.028)
Macro Predictors		
unemployment rate	0.143 +	0.121
	(0.080)	(0.112)
constant	5.686***	5.641***
	(0.078)	(0.102)
Random Effects Parameters		
var (informal worker)	3.90e-13	0.001
	(3.32e-12)	(0.004)
var (constant)	0.089	0.177
	(0.030)	(0.058)
var (residual)	2.337	2.245
	(0.024)	(0.023)
N Level 1	18935	18935
N Level 2	20	20
Wald Chi2	133.09	164.45
Log-Likelihood	-34937.844	-34565.318
BIC	70023.4	69278.4

Table B: Linear hierarchical varying intercept varying slope regression

 $\begin{array}{c} \text{BIC} & 70023.4 \\ + \text{ p}{<}0.10, \ \ \text{p}{<}0.05, \ \ \text{**} \ \text{p}{<}0.01, \ \ \text{***} \ \text{p}{<}0.001 \\ \text{Source: LAPOP 2008, 2010; WDI World Bank (2012)} \end{array}$ 

	(M 14)	(M 15)	(M 16)	(M 17)
	Formal Worker	Informal Worker	Formal Worker	Informal Worke
	Welfare Demand	Welfare Demand	Redistribution	Redistribution
Micro Predictors				
low income	0.120	0.027	$0.152^{*}$	0.165 +
	(0.107)	(0.095)	(0.060)	(0.087)
middle income	0.153 +	-0.015	0.178***	0.037
(ref: high income)	(0.079)	(0.084)	(0.033)	(0.082)
education	-0.028	0.041	-0.002	0.074**
	(0.025)	(0.032)	(0.015)	(0.027)
female	-0.024	-0.136**	0.018	-0.063
	(0.036)	(0.043)	(0.028)	(0.053)
age	0.020	0.014	0.004	-0.012
-	(0.022)	(0.022)	(0.028)	(0.033)
children	0.059*	0.051**	0.045	0.046*
	(0.026)	(0.019)	(0.028)	(0.022)
religious	-0.031	-0.049*	-0.028	-0.051+
0	(0.024)	(0.023)	(0.027)	(0.029)
left ideology	0.062	-0.102	0.257**	0.024
	(0.085)	(0.089)	(0.096)	(0.094)
centre ideology	-0.102	-0.271**	-0.061	-0.225*
(ref: right ideology)	(0.088)	(0.095)	(0.081)	(0.095)
Macro Predictors				
unemployment rate	$0.141^{*}$	0.095	0.091	0.033
	(0.061)	(0.058)	(0.079)	(0.086)
quality of	0.099	0.066	0.256*	0.195 +
institutions	(0.074)	(0.067)	(0.119)	(0.103)
constant	5.609***	5.863***	5.567***	5.792***
	(0.122)	(0.090)	(0.124)	(0.116)
Random Effects Pa		0.071	0.101	0.110
var (constant)	0.096	0.074	0.134	0.119
man (magidur-1)	(0.032)	(0.029)	(0.073)	(0.056)
var (residual)	2.328 (0.096)	2.338 (0.099)	2.119 (0.111)	2.291 (0.110)
N Level 1	10178	7956	10178	7956
N Level 2	19	19	19	19
Wald Chi2	78.45	149.10	103.17	81.17
Log-Likelihood	-17106.988	-12257.276	-16674.498	-12193.855
BIC	34343.2	24640.3	33478.2	24513.5

Table C: Linear hierarchical varying intercept varying slope regression: Institutional quality

#### Chapter 4

## Social Policy and the Informal Sector

#### Abstract

If the informal employment sector is a function of discontent with social policies, then informalization is endogenous to welfare policies so that the size of the informal sector can be interpreted as 'vote' against the public system. This can, however, only be true for the exit seekers, i.e. those not doomed from the outset by socio-economic structures to work in the informal economy. This study therefore attempts to build a micro foundation for informalization, taking into account the tax compliance literature and incorporating contextual factors of public goods provision and labor market relevant components. Whether discontent with social services increases informal employment is tested in a logistic hierarchical model on survey data from the Latinobarometer, 2009 and 2010, focusing particularly on those individuals who have sufficient bargaining power to choose between formal and informal labor, labeled as potential exit seekers. Findings reveal that social policy discontent and a dysfunctional institutional framework increase the likelihood of informalization. Lower bargaining power in the form of lack of education and lower income are, however, most decisive for entering the informal labor market when considering the entire group.

#### 4.1 Introduction

Labor markets of low- and middle-income economies are segmented by the persistent phenomenon of informality, leading to dysfunctional outcomes such as lower productivity and stagnating economic growth. Besides these macro level consequences, which have been intensively studied mainly by economists (De Soto, 1989; Loayza and Rigolini, 2011), we still know little about what drives individuals to seek work in the shadow economy. Regulatory barriers (Loayza, 1996; Johnson et al., 1998), low institutional quality (Saavedra and Tommasi, 2007), the quality of the legal system (Dabla-Norris et al., 2008; Carnes, 2014), and low social trust or tax morale (Torgler and Schneider, 2009; D'Hernoncourt and Méon, 2011) have been identified as important factors that increase the informal economy at the macro level. But studying individual level determinants of informalization is still in a nascent phase (e. g. Torgler, 2005); a micro foundation is still missing.

The only consensus we have so far is that informalization must be a consequence of a bundle of reasons because informal sector workers are made up of a highly heterogeneous group of individuals. Particularly the least well-off are much more likely to follow a predetermined path that leads straight into informality due to their socio-economic status while some high-income earners deliberately decide to work 'off the books' (see Perry et al., 2007). Therefore, those who have a real choice between formal and informal employment – the voluntary informals – need to be distinguished from the 'doomed' – the involuntary informal workers. Latin American welfare states responded in different ways to the needs of an increasingly stratified labor market and a highly unequal society, implementing Conditional Cash Transfers (CCTs), non-employment-related subsidies targeted at the poor, and increasing the coverage of social assistance. Nevertheless, while CCTs and social assistance programs reach a very progressive distribution of support, the bulk of the welfare system is made up of social insurance that is still very regressive in nature as Lindert et al. (2006) have illustrated. The upward bias of public transfers in Latin America is likely to reinforce the dualization and fragmentation of the labor market. The question that this article addresses is therefore not primarily why workers enter the informal economy but more specifically, whether informalization is a *vote* against the status quo of a public welfare system that fails to ease income distribution and high poverty rates. If this is the case, then one could interpret the size of the informal sector as directly signaling a preference against the status quo of social policies. Or using the terminology from Hirschman (1970), this article scrutinizes whether informalization is a further type of "exit option" for those informals who can afford it.

While studies on the informal sector have so far focused at either the country level (Loayza, 1996; Johnson et al., 1998; Friedman et al., 2000; Torgler and Schneider, 2009; D'Hernoncourt and Méon, 2011) or firm level (Dabla-Norris et al., 2008), this paper not

only considers the issue at the micro level but also the contextual influences for individual deciding to go underground. The academic debate on tax compliance (see Allingham and Sandmo, 1972; Torgler, 2005; Saavedra and Tommasi, 2007) provides useful evidence on individual tax behavior and serves as a good starting point for considering an individual's decision to enter the informal employment sector. But this article also goes beyond this literature by arguing that tax evasion differs to informalization because of the latter's complexity, and turning the analytical focus toward a context of dysfunctional state capacities under which individuals make their 'choices.'¹

Since the Latinobarometer (LAB hereafter) recently added a response category to identify self-employed informals, we are now in the unique position of being able to assess informalization using a micro-level framework that also considers variation across countries and context factors. One can define informal employment by the absence of a formal working contract, protection by law, and payment of income taxation. The article focuses however on informal workers who consider themselves as self-employed in the informal sector – the most powerful group of informals – as survey information mainly captures this group of informal workers. In the course of the analysis I distinguish voluntary and involuntary informals by level of education.

I study informalization in a cross-country analysis of Latin American states because Latin America illustrates a region with large informal economies, varying degrees of established welfare systems, and experience with both aspects over a long period of time. Moreover, both the size of the informal sector and the generosity of the welfare state vary among these countries. Pooled survey data from the Latinobarometer (2013b) for 18 Latin American states for 2009 and 2010 is used to test the theoretical argument. The logistic hierarchical regression analysis supports the intuition that informalization is a function of individual characteristics, the overall tax burden, welfare provision, and institutional quality. The level of education and coming from a low-income household and poor family – all elements reflecting lower bargaining power in the labor market – have the most influence on the likelihood of entering the informal labor market. For the

¹The notion of 'choice' is not meant in absolute terms because in many cases, informalization is not always a deliberate choice of the individual as the analysis below will show.

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group of informals who have greater bargaining power through higher education, a better institutional framework particularly decreases the likelihood of informalization, and distrust in the state and dissatisfaction with social services elevate chances for entering the informal labor market. Informalization is therefore to some extent indeed a 'vote' against the public system when it falls short of the individual's expectations.

The remainder of the article is structured as follows. The first section discusses the identification of informal wage earners and the concept of informality. The structure of Latin American welfare systems is then briefly introduced followed by the development of a theoretical argument. The empirical strategy, model specification, and variables are then described with a subsequent presentation of results and robustness tests. The final section concludes the article's findings.

#### 4.2 Who are the Informals?

Informal workers make up the largest group among social classes in Latin America (see Portes and Hoffman, 2003). A larger share of the labor force in low- and middle-income countries is also likely to be familiar with both formal and informal employment because of the permeability of formal and informal labor (Schneider and Karcher, 2010). Hence, studying the factors which lead to informalization becomes even more important. The informal sector is very heterogeneous (see Perry et al., 2007) so that we are dealing with different forms of informality: among others deliberate tax avoidance, subsistence, working 'off the books', employer discretion (for instance, the employer decides not to pay social security contributions for the employee). We can therefore differentiate between voluntary and involuntary informals, the latter being those unable to freely decide on the sector of employment. The diversity of the labor market group of informals also hampers the conceptualization of informality.

There are numerous definitions of the informal sector in the academic debate (see Gerxhani, 2004). The International Labor Organization (ILO) attempts to provide a standard classification for informality. It is based on two central features: the lack of protection and recognition by a legal framework and the vulnerability of the individual regarding aspects such as property rights or job security (ILO 2002, 3). Illegitimate and criminal behavior is not considered as informal activity. Other definitions accentuate the production side of informal labor (Schneider, 2005) or the difference in transaction costs that arise for those whose contracts are not protected by law (Feige, 1990). Theoretical conceptualization of informality, as we see here, is very demanding and puts heavy constraints on empirical efforts to identify informal workers. Because of this difficulty I concentrate the analysis on informals who consider themselves as informally self-employed in the survey, going back to Hart's (1973) classification of informals by their status of self-employment. The group of informals that is captured using this identification strategy is the active informal labor force and therefore represents the most powerful labor market group of informals. I acknowledge that this is an imperfect measure of informality which omits some informal workers such as a larger share of women who do manual work while taking care of their children and probably consider themselves as housewives rather than informal self-employed, leading to misreporting in the survey. But a recent study of Loayza and Rigolini (2011) supports the operationalization of informals with the use of the self-employment survey category. In cross-country surveys, self-employment is often the only category that we have to estimate informal labor.

Finally we need to differentiate between voluntary and involuntary informals. I define workers as involuntary informals with insufficient bargaining power in the labor market to be able to choose between formal and informal employment. To identify voluntary informals I use education levels because it reflects an individual's bargaining power in the labor market and the opportunities for formal employment that are largely in the high-skill or public sectors.

#### 4.3 The Latin American Welfare State

The fragmentation of the Latin American labor markets can be traced back to the emergence of labor market institutions (see Carnes, 2014) and the developments and reforms of the welfare systems (see Wibbels and Ahlquist, 2011, on social insurance in developing countries). The income distribution in Latin America is one of the most

skewed in the world (De Ferranti et al., 2004). In order to protect individuals from risks, welfare systems, focusing on social security for privileged groups such as public servants and high-income individuals, were already emerging in the early 20th century in Latin America (Haggard and Kaufman, 2008). Nevertheless, public transfers have only limited effects on narrowing the gap between rich and poor as social insurance redistributes income with an upward bias in most Latin American countries (see Lindert et al., 2006). Pensions and unemployment benefits in many countries have been bound to formal employment and therefore have supported stratification of the labor market particularly in the region's early period of welfare state development. Only CCTs and basic social assistance programs, which have experienced popularity in the last two decades, reach the lower income groups, but because unit subsidies are very low (see Lindert et al., 2006), they have no overarching impact on income inequality. Among the recipients of CCTs is a large segment of informal workers due to transfers not being bound to formal employment. Together with social assistance programs CCTs support individuals with education vouchers, health care, family allowances, and elderly care. However, despite concerns that CCT's incentivize individuals to stay in the informal economy in order to remain eligible for the means-tested subsidies, researchers did not detect a reduction in adult employment because of CCTs so far (Fiszbein et al. 2009, 119). De La O (2013) has illustrated with a field experiment on Progress, now called Opportunidades, in Mexico that CCTs have a positive impact on the incumbent party that propagated this allocation, so that we can assume that benefit provision by the state also increases the propensity to see the state in a favorable light. In contrast, when benefits are denied because of a dysfunctional state and a lack of distributive capacities, or when benefits favor particular groups because of clientelism, corruption, or patronage, individuals might turn their backs on the public transfer system. Informalization might then be an exit option, revealing preferences that oppose the status quo of the welfare system, leading to the following argument.

#### 4.4 The Argument: Motives for Informalization

For a large segment of society, informalization is a logical consequence because of low levels of education and a low-income-family background. Thus, the informal sector needs to be divided into those who are voluntarily working in the informal sector and those who have no options other than informality. A building block of current research on the informal economy (Schneider, 2005; Schneider et al., 2010) is the assumption that the shadow economy is caused by multiple factors so that we can safely say there is a consensus on informalization being a consequence of several factors. The question is, which is the dominant one? I propose that an important factor is satisfaction with public welfare goods provision when considering only those individuals who have a real choice about employment in the two sectors.

The argument is made up of three parts: individual fiscal behavior and especially the likelihood of informalization is affected by (i) individual level factors such as income, education, and socio-economic background, (ii) systemic factors such as the capacity of the state to enforce taxation, actual public goods provision, and regulatory barriers, and (iii) the perception of the performance of the state in providing returns for paid contributions.

#### 4.4.1 Individual Factors

The economic literature on tax compliance is very abundant, starting with simple costbenefit calculations on taxation. This literature is of course not fully applicable to lowand middle- income democracies because of differences in context (e.g. weaker law enforcement), but we can use it as a point of departure to consider factors at the individual level that might lead to informalization. Risk taking potential and personal monetary gains and losses are dominant components influencing individual fiscal behavior in highincome economies (see Slemrod and Yitzhaki, 2002, for an overview on the taxation literature). Fear of punishment is a relevant factor (cf. the deterrence model, established by Allingham and Sandmo, 1972) for tax avoidance. But as Alm et al. (1992) emphasize, fear of punishment does not explain why so many individuals comply. Moreover, not all

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tax payers are 'gamblers' who balance benefits and risks, not to mention a large share of informal sector workers in low- and middle-income economies who primarily need income to survive, no matter whether this income is subject to taxation or not. Tax evasion and informalization are two related but still distinct events that do overlap but not fully. Tax evasion requires a deliberate decision against the payment of tax (e. g. see Allingham and Sandmo, 1972; Alm et al., 1992; Slemrod and Yitzhaki, 2002; Feld and Frey, 2007; Slemrod, 2007) but becoming an informal wage earner is not necessarily equivalent to an unwillingness to comply. What we know from World Bank studies on the informal economy (Perry et al., 2007), household income and the socio-economic background of the family already predetermine the chances of a child to gain education and therefore to increase their chances of finding employment in the formal labor market. Thus, we can expect that individuals from poor family backgrounds and who are under-educated have an increased likelihood of entering the informal economy. Figure 4.1 displays the aggregated distribution of education by country, showing a very diverse picture of education attainment across the region.

I argue that educational background² and personal income are the most decisive factors in entering the informal sector as a self-employed informal wage earner because these elements also reflect the bargaining power of the individual toward the employer³. Bargaining power is mainly built on education and also to some extent on financial resources that empower the position of the employee toward the employer by decreasing the asymmetry between the two parties (e. g. when negotiating wages and employment)⁴. Individual labor forces in developing countries struggle with collective action capacities. Many sectors lack strong unions, which also strongly varies by country in Latin America (Martin and Brady, 2007), and unions can also be very exclusive, supporting only formal wage earners (see Carnes, 2014). Employment is at the discretion of the employer,

²Unfortunately, the LAB does not encompass information on skill specificity and sector of occupation so that the analysis focuses on the level of education acknowledging that a differentiation by sector and skills of the individual would enhance theoretical precision.

³Besides theoretical considerations of why risk aversion should play a less important role for informalization in contrast to factors such as education and institutional context, it is unfortunately not possible to empirically consider risk aversion because the LAB does not provide information on individual risk behavior or uncertainty.

 $^{{}^{4}\}mathrm{Bargaining}$  power also depends on labor demand and abundance/scarcity of low or high skilled workers as discussed below.



Figure 4.1 Level of Education by Country

so that sometimes employees cannot decide for themselves to be either formally or informally employed⁵. The level of education should play an important role in such a situation as lower levels of education and more generalized skills encompass lower bargaining power, especially in labor markets with a large manual production sector where general skills are needed (see Saint-Paul, 1996). Education should therefore be the first determinant of informalization as it is decisive for how much "choice" the individual has for informalization or formal employment.

## **H 1** The more educated the individual, the lower the likelihood of entering the informal labor market.

The education effect might be curvilinear because at some point it can be economically reasonable to work off the books among the well-educated. In the empirical section I

¹⁼Illiterate; 2=Incomplete Primary; 3=Complete Primary; 4=Incomplete Secondary; 5=Complete Secondary; 6=Incomplete Higher Edu.; 7=Complete Higher Edu.

 $^{^5\}mathrm{Unfortunately},$  we cannot empirically analyze the influence of the employer in informalization.

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therefore test whether the level of education has a non-linear effect. Next to education I expect individuals who are coming from low-income households and family backgrounds with lower levels of education to have a higher likelihood of becoming self-employed informals. Individuals with low income again have a lower bargaining power towards the employer due to the need for income in order to sustain their living conditions. From a rational choice perspective we could also expect that higher-income households have a greater likelihood of going underground in order to avoid taxation as the benefit is economically less lucrative considering the amount of contributions based on taxation, but this is where the insurance effect of social security plays an important role (cf. Moene and Wallerstein, 2001). Additionally, the welfare system is rather regressive so that the rich do indeed receive rewards for their input⁶. Of course, informal employment can also lead to low income, so that these two factors are reciprocally related, but I will specifically focus on long term household income instead of short term gains to diminish possible bias⁷. Furthermore, the individuals' social origin, proxied with the educational attainments of the individual's parents, needs to be incorporated in the theoretical argument because individuals who grow up in low-income households lack material support to pursue an educational career that allows them to qualify for formal employment.

# **H 2** The higher the socio-economic status of the individual ((a) parental background and (b) household income), the lower the likelihood of entering the informal labor market.

#### 4.4.2 Public Transfers, Institutional Quality, and Informalization

The central building block of the argument is the role of the state for informalization. If taxes are not spent well by governments due to corruption or simple mismanagement

⁶Finally, one could also argue that some informals deliberately choose informal employment to free ride on public welfare goods. In such case, social expenditure should increase the likelihood for informalization as tested below.

⁷As education and income are related and therefore might reinforce each other, the empirical investigation also examines both variables separately (see *Supplementary Material* and *Results* section, Table D).

through low governmental capacity, tax evasion appears a logical consequence to punish the government or to 'vote' against it by means of non-compliance. However, this effect should be visible predominantly for individuals who have the freedom of choice between formal and informal work. Research on tax compliance gives us many important insights on the relevant macro level factors for fraudulent behavior on taxation. The harder it is to enter the formal market due to regulatory barriers, Djankov et al. (2002) find, the larger the informal economy (see also Loayza, 1996; Johnson et al., 1998). Labor market regulations influence informalization, especially of firms who face even greater difficulties in entering the formal market than individual workers. The most famous study in this regard has been pursued by De Soto (1989) who investigated how long it takes to establish a business in Peru with and without bribery. The higher the barriers to starting a business, the greater the likelihood that individuals go underground. Central labor market regulations that affect the balance of power between the employed, unemployed, and employers are minimum wages, unemployment benefits, and dismissal costs (Saint-Paul, 1996). Dismissal costs increase the informal labor market because formal hiring becomes more costly. Severance pay is relatively high in Latin America compared to the OECD (Heckman and Pagés, 2000) and has been identified as an obstacle to formal employment. In contrast, higher unemployment benefits could motivate workers to enter the formal labor market because in the event of unemployment they would have recourse to such benefits; but these services are usually targeted at formal employment. The consequences for the labor market of minimum wages are ambiguous as researchers have shown so far (Boeri et al., 2008). It can increase the informal sector as it increases hiring costs.

That the tax rate matters for individual tax behavior is a classical argument in the tax compliance literature (Hatipoglu and Ozbek, 2011) because taxation influences net income therefore requiring the tax burden to be factored in. Finally, informalization should be influenced by the general demand for labor. If unemployment rates are high, formal employment is more difficult to find due to the abundance of labor. A context of low labor demand therefore also reflects a context of low bargaining power for the individual. In this vein, a large informal economy that is already established can also

facilitate employment in the informal labor market. The scope conditions of labor market institutions, tax burden, labor market demography (informal economy and labor demand) should therefore influence the likelihood of the individual opting for informalization. But this article goes further by arguing that the welfare system and its distributive performance also poses a central condition

A large informal sector might be a sign that the public welfare system is not very appealing so that individuals opt out of the public system. An attractive welfare state can pose an incentive for informal sector workers to enter the formal sector when benefits are employment related. Attraction encompasses both a generous system of social benefits and a state that is actually capable of providing social services in a fair way. In a laboratory experiment, Alm et al. (1992) finds that it is not only risk aversion that leads to tax compliance but also the expectation of public goods as reward for paid contributions. Outside of the laboratory, Torgler and Schneider (2009) find that institutional quality significantly affects the size of the shadow economy at the macro level. Similarly, rule of law and the performance of the legal system have been identified as significantly influencing informalization of businesses (Dabla-Norris et al., 2008). If the institutional system is functioning well, it should increase reliance on the state when it comes to welfare provision (see Mares, 2005), because a more functional and efficient institutional framework is more capable of providing public goods (see also Rothstein, 2011). I propose that a sounder institutional framework should decrease the informal sector, posing an incentive to enter the formal labor market. Institutional strength encompasses rule of law, lack of corruption, accountability, a capable regulatory system, and political stability, ensuring the generation of public revenue to finance social services and distributive capacities to deliver social insurance and public transfers. Public goods provision encompasses a political dimension: how parties design social policies and implement them. But I refrain from focusing directly on party performance because what matters is the long-term development of governmental performance on public goods provision. I instead focus on institutional frameworks including rule of law, government effectiveness, regulatory quality, accountability and stability of the political system and the absence of corruption, based on the Worldwide Governance Indicators (WGI) of

Kaufmann et al. (2010). Figure 4.2 gives a first intuition about the relationship between the informal economy and institutional quality (World Bank 2012, own calculations (see section 4.5.1)) and impartiality – an alternative indicator, reflecting fair treatment of individuals by the state (Teorell et al., 2011). The impartiality index is based on a procedural concept of governmental quality, as it measures how fair individuals are treated by public officials. High values reflect high impartiality of the state, meaning that no one is favored based on kinship, clientelistic relationships, or affinity to social groups that rest upon ethnicity or religion, for instance.



Figure 4.2 Institutional Quality, Impartiality, and the Informal Economy

**H 3** Higher institutional quality decreases the likelihood of individuals entering the informal labor market.

Next to the performance of the institutional framework of the state, how welfare benefits are distributed should make a difference. Ideally, one should examine the quality

of welfare provision or the coverage rate (e. g. the replacement rate is often used in the OECD context; Scruggs and Allan, 2006) and at how universally they are provided and not just at the level, but comprehensive data on the former aspects is lacking for the countries studied here. Spending is also an imperfect measure of welfare generosity because welfare provision is rather regressive in Latin America (see Lindert et al., 2006). Not all citizens are equally treated regarding transfers and insurance. However, CCTs are targeted at the poorest in the state so that it would also be incorrect to assume that welfare goods are only received by the upper rungs of the income ladder. If the state provides public transfers, we should observe a declining informal sector since such an investment in human resources and an insurance against risk should lead to greater employability on the one hand, and satisfaction with the public system on the other so that the exit option is not chosen. Alternatively, I use information on pension coverage of the active working population provided by Rofman et al. (2008) and data on the neonatal mortality rate (World Bank, 2013b)⁸, that are used as proxies for the scope of welfare provision (for social security and health care) as suggested by Pribble  $(2011)^9$ . However, increased public transfers can also work in the opposite direction, posing an incentive to stay in the informal sector when benefits are non-contributive in nature and based on means-tests. In such a case, informalization might be reinforced to have access to means-tested social programs.

# **H 4** Better welfare provision decreases the likelihood of individuals entering the informal labor market.

⁸The neonatal mortality rate measures the number of deaths of newborns "before reaching 28 days of age, per 1,000 live births in a given year" (World Bank, 2013*b*). The measure is a proxy for the scope of a country's health care system.

⁹The school enrollment rate, as proxy for coverage of education spending has been considered as well, but the effects are not significant (see supplementary material, Table C). The finding is surprising, as a negative effect on informalization is expected. But considering the mechanism, school enrollment might be particularly relevant for younger individuals who still have the chance to go to school and not for adults that are considered in the analysis below.

#### 4.4.3 Government Perception and Society

The study argues that informalization is a 'vote' against the status quo of the welfare system by those informals who have the freedom of choice between formal and informal labor market. To bring in state performance on public goods provision we also need to factor in how individuals perceive the performance of the state in fulfilling this task. What we know from Carnes and Mares (2013), it is hard for individuals to judge what the pros and cons of a given social policy are. The authors study individual choice on pension programs with individuals being able to choose between a public or private scheme. Social policy programs are complex products affecting different parts of the political economy and it is also difficult even for experts to predict all possible consequences and externalities. Depending on how far reaching the policy is designed, consequences can be very harsh in the long run but positive and appealing in the short term. We therefore also need to consider the individual's attitude toward the state and not only the objective performance.

### H 5 The more individuals are satisfied with the performance of the state, the lower the likelihood of entering the informal labor market.

It is not only the perception and attitude toward the state that matters for tax evasion but tax morale and trust also account for the size of the informal sector as the academic debate has shown. Taxation is a central part of the public goods game. Individuals contribute to public revenue via taxation in order to receive transfers or to benefit from insurance (Moene and Wallerstein, 2001). Feld and Frey (2007) refer to this as a "contractual relationship" with "duties and rights for each contract party" (2007, 104). If some individuals deviate by noncompliance, that is, by not paying taxes, others may become more inclined to follow such deviant behavior. Tax morale therefore also affects the size of the shadow economy (Torgler, 2005; Saavedra and Tommasi, 2007) and hence, needs to be controlled for. Moreover, Feld and Frey (2007) reveal that trust in the public administration adequately using taxation increases tax compliance (see also Scholz and Lubell, 1998) while D'Hernoncourt and Méon (2011) illustrate that it is mostly generalized trust which affects the size of the informal economy in a macro-level analysis of developed and developing countries. It is therefore not only important to consider the individual's attitude toward taxation, but also generalized trust.

To sum up the theoretical framework, informalization should be a function of the level of education and socio-economic background reflected by income and parental education (reflecting bargaining power, H1 and H2), labor market institutions (dismissal costs (severance pay), hiring costs (minimum wage), entry barriers (labor market regulations)), demand for labor (unemployment rate, informal economy), the tax burden, tax morale, trust, and public goods provision (public transfers, capacity of the state to provide, H3 and H4, and perception of governmental welfare performance, H5). According to the argument set out in this section, the latter factors – public goods provision and satisfaction with it – should be distinctive if informalization works as an exit option for social policy discontent. The mechanism should work mainly for those informals who have a real choice between formal and informal employment – individuals with higher education.

Finally, a caveat for the analysis poses the direction of the causal mechanism. It is likely that certain factors reinforce each other. An increasing informal sector can deteriorate public goods provision to some degree because tax revenue is reduced, which then feeds back on informalization. Ideally, we should study informalization over time or in an experimental setting, posing high demands on data generation for the future. For now the issue is addressed using two survey waves, 2009 and 2010, and lagged variables at the macro level.

#### 4.5 Empirical Setup

The dependent variable, informalization, is measured with survey data from the Latinobarometer (LAB) from the years 2009 and 2010 (survey years are pooled). Respondents are asked about their employment situation. Individuals that respond as being explicitly self-employed informals are categorized as informal sector workers with a dummy variable. The other options are self-employed professional, business owner and farmer/fisherman next to a range of further options for different forms of employment (e. g. employee in a private or public firm, senior or middle management etc.). The LAB includes a concrete answer category for informal employment to the survey only since 2008 so that surveys from 2009 and 2010, in which the independent variable items have also been surveyed, can be used¹⁰. As Loayza and Rigolini (2011) have demonstrated with several robustness tests, self-employment is a valid identification category for informal sector workers in low-and middle-income countries since "most self-employed workers tend to be low-skilled and unregistered workers" (2011, 1508).

Finally, I differentiate between voluntary and involuntary informals because the logic of informalization as a 'vote' against the status quo of the welfare system is not applicable to involuntary informals. As elaborated above, bargaining power reflects the discretion of the informal to choose between the two labor markets. To identify the cut-off point (the point at which the level of education gives the informal the means to choose between informal and formal employment) I run the model on the full sample, testing the effect of education on informalization. The predictive marginal effects plot of education and education squared that controls for the non-linearity effect of education (see Figure 4.3 below) illustrates the education effect and empirically qualifies the choice of the cut-off point *completed secondary education*.

As reasons for entering the informal sector need to be found at the micro as well as at the macro level, I employ a hierarchical logistic regression model¹¹. Observations are not independent but cluster within countries so that a hierarchical model is statistically recommended (Steenbergen and Jones, 2002). The LAB has been conducted in the following Latin American countries¹²: Argentina, Brazil, Bolivia, Costa Rica, Colombia, Chile, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela.

 $^{^{10}{\}rm The}$  2008 survey does not contain the item of the independent variable satisfaction with public education.

 $^{^{11}\}mathrm{The}$  intra-class coefficient (ICC) is 0.05 for the full model and 0.06 for the subgroup.

 $^{^{12}\}mbox{Because of a lower response rate on some survey items, observations are reduced at level one so that N= 29732.$ 

#### 4.5.1 Estimation Model and Variable Description

The dependent variable is a dichotomous measure so that a logistical model is applied. I use a varying-intercept hierarchical model allowing the intercept to vary across countries¹³. The dependent variable informalization reflects the likelihood of being a self-employed worker in the informal sector. Following the notation used in (Gelman and Hill, 2007), I specify the model as follows:

$$\Pr(y_i = 1) = logit^{-1}(\alpha_i + \beta_i X_i + \beta_i K_i), \text{ for } i=1,...I \text{ (individuals)}$$

$$\alpha_i \sim N(\gamma_0^{\alpha} + \gamma_1^{\alpha} \mathbf{Z}_i + \gamma_1^{\alpha} U_i, \sigma_{\alpha}^2)$$
, for j=1,... J (countries)

Micro level independent variables (socio-economic status and perception of government performance) are demonstrated by K. The vector Z reflects a set of independent variables at the macro level: institutional performance and welfare supply. U illustrates a vector of macro control variables and X is a vector of micro controls. Next to sociodemographic characteristics such as gender (female), age, and marital status (married), I also include control variables measuring religiosity¹⁴, and social trust (dummy variable). Very religious individuals might have a higher likelihood of informalization because of stronger community ties and a dense network. More trusting individuals might be more likely to comply with the public goods game and work in the formal economy as discussed above. A variable for the perception of fairness of the income distribution (reflecting income inequality as well) is added because, as Feld and Frey (2007) mention, it is possible that individuals are more willing to pay tax even if they do not receive returns because it is for the greater good of the society. Based on the theoretical discussion above, I additionally factor in individual tax morale. The LAB asks respondents to indicate the extent to which they think tax avoidance is justifiable or not. The scale of 1 to 10 is too fine to measure tax morale as the skewed response distribution reflects. I therefore use

¹³A varying-intercept varying-slope model with education as varying slope has been tested as well but the Likelihood ratio test is insignificant, supporting the superior model fit of the varying-intercept model.

¹⁴The item that asks for the level of religiosity of the individual is coded from 0 meaning 'not practicing', to 4 'very devout'.

a dummy variable for tax morale with 1 (values 6-10) reflecting the attitude that tax avoidance is justifiable and 0 (values 1-5) that it is not.

#### Income, Education and Family Background

The survey does not inquire about the income status of the respondent; the LAB only asks respondents about the possession of a number of assets. Based on this information I create an income index using multiple correspondence analysis (MCA). It is very common in surveys run in low- and middle-income countries, that household income or individual income is not explicitly asked so that researchers rely on asset information (see Filmer and Pritchett, 2001; Vyas and Kumaranayake, 2006). The asset items are dichotomous variables so that MCA is used. Higher values reflect higher income.

The independent variable education is operationalized with a measure of the level of education. Because of differences in education systems, the LAB provides an index which categorizes years of education into a 7-point scale based on a standard classification of education attainment comparable across the region, starting from illiterate at 1 to complete higher education at the value 7. To measure family background I use the level of education of the respondent's parents (parents' edu.) that is based on the same classification.

#### Perception of the Government

I take three items from the LAB to measure attitudes toward the state in providing services, and trust in the state in handling the task of public goods provision. Dissatisfaction with public social institutions (pub. education dissatisfaction) – in this case satisfaction with public education – mirrors dissatisfaction with how the state provides concrete social services and should, therefore, show a positive coefficient in the estimation model if informalization is a consequence of social policy discontent. A further item inquires how much the respondent generally confides in the government (confidence in gov't), starting at 1 for low trust up to 4, for high trust. Last, I use the item state capture which measures the perception that the state is 'captured' by elites with 1 reflecting that the country is favoring a few powerful groups and 0 measuring that the state is supports common wellbeing of all. All three items are much less correlated then expected  $(\rho_{statecap_confidence} = -0.34, \rho_{edu_diss_statecap} = 0.13, \rho_{edu_diss_confidence} = -0.18)$  so that we can assume that they do not measure the same dimension but different aspects of the perception of government performance.

#### Welfare Provision and Quality of Institutions

If the state does not manage to provide welfare goods, an increase in informality is expected. Per capita values on public social spending from CEPAL (2013) is used (lagged by one year) because per capita values reflect the amount of welfare that is on average available for each citizen. Pension coverage of the active working population (Rofman et al., 2008) and the neonatal mortality rate (World Bank, 2013b) serve as proxies for welfare provision. Additionally, institutional performance is considered to be influential for informalization, with lower performance leading to greater informality. To measure institutional quality I use data from the World Bank's Worldwide Governance Indicators (2012b, WGI) (see also Torgler and Schneider, 2009). The indicators measure several dimensions of the state: control of corruption, rule of law, regulatory quality, voice and accountability, political stability, and government effectiveness (Kaufmann et al., 2010). I use a principal component analysis (PCA) to reduce the six indicators to a single dimension that reflects the latent information of institutional quality. Further, I employ data from the Quality of Government expert survey by Teorell et al. (2011) measuring impartiality of the public administration, to test the sensitivity of the argument. According to Rothstein (2011), impartiality as concept to measure governmental quality travels better across countries because of its procedural character that is not bound to specific institutions. The impartiality index includes information about the public administration treating individuals equally (higher values mean more impartiality). Alternatively, I use the corruption perception index CPI (Transparency International, 2013) as a different approach to assess the performance of the state, focusing entirely on corruption¹⁵. A positive effect on informalization should be observed if the likelihood to enter the informal labor market follows from poor institutional quality.

 $^{^{15}{\}rm The}$  CPI is recoded so that higher values indicate high corruption. In the institutional quality measure, absence of corruption is only one aspect among others.
#### Macro Controls

I include information on labor market regulation and tax burden in the model. Severance pay after five years of tenure is measured by weeks of salary that have to be paid by the employer (Employing Workers Data, World Bank, 2013*a*). Minimum wage per month is measured in constant U.S. dollars¹⁶ (World Bank, 2013*a*). I additionally control for the level of taxation using the tax burden indicator of Gómez Sabaini and Jiménez (2012) (CEPAL data). Information on the unemployment rate (CEPAL 2013) is incorporated because higher unemployment stands for lower labor demand. Additionally, a measure of the informal economy is included because a large informal sector facilitates participation in informal employment structures. Data from Schneider et al. (2010) on the informal economy relative to GDP is used, capturing the wealth that is generated in the informal sector. Finally, I include a dummy variable for the survey year (2010, reference category is 2009). Descriptive statistics are displayed in Table A (Appendix). Macro controls are added based on stepwise inclusion because of the low number of free parameters at level two and collinearity between some of the macro variables.

#### 4.6 Results

#### 4.6.1 Education and Family Background

As a first approach on informalization I scrutinize the probability of entering the informal labor market for both voluntary and involuntary informals, to test whether we can actually speak of the "doomed" with regard to the latter group. Table 1 shows estimation results with logistic coefficients. Findings support the expectation of an influential education- and family-background-effect expressed in hypotheses one and two. Chances for informalization decrease with every further upward step on the education ladder (M1). Theoretically, it is possible to find ambiguous effects from the level of education as elaborated above. To test the possibility of a curvilinear function, I include education as squared term in the equation (see Table 1 M2).

¹⁶Data for severance pay and minimum wage is taken from 2009 to incorporate the period of adjustment. I also test the model with the job security index of Heckman and Pagés (2000) (see Table E in the supplementary material section). The job security index is not significant.

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DV: informalization	(M 1)	(M 2)
Micro Predictors		
Education	-0.125***	0.466***
	(0.012)	(0.048)
$Education^2$		-0.077***
		(0.006)
Female	-0.678***	-0.679***
	(0.033)	(0.033)
Parents' edu.	-0.074***	-0.063***
	(0.013)	(0.013)
Religiosity	-0.012	-0.014
-	(0.015)	(0.015)
Age	-0.002	0.001
	(0.001)	(0.001)
Married	0.009	-0.001
	(0.033)	(0.033)
ncome	-0.081***	-0.089***
	(0.021)	(0.021)
Frust	-0.025	-0.014
	(0.040)	(0.040)
Tax morale	$0.127^{**}$	0.115*
	(0.046)	(0.047)
Unfair income distribution	0.043	0.048
	(0.039)	(0.039)
Year	-0.073*	-0.068*
	(0.032)	(0.032)
Constant	-0.535***	-1.597***
D 1 THE D	(0.126)	(0.153)
andom Effects Parameter (constant)	s 0.154	0.161
×	(0.540)	(0.056)
N Level 1	29732	29732
N Level 2	18	18
Wald Chi ²	806.62	907.04
Log Likelihood	-12875.32	-12791.25
IC	25884.5	25726.7

Table 1: Logistic Hierarchical Varying-Intercept Regression

Source: LAB 2009, 2010; Standard errors are in parentheses. + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001

Adding the squared term for education improves the model fit as the BIC is lower in M2 compared to M1. In order to meaningfully interpret this finding I plot the predictive



Figure 4.3 Predictive Margins of Education and Education Squared

marginal effects (Figure 4.3)¹⁷ with 95% confidence intervals. As expected, the likelihood of becoming an informal self-employed is higher at very low levels of education (complete primary education), close to 20%, but steadily decreases so that more and more years of education decrease the likelihood. Individuals with higher education have a likelihood for informalization of only 6%. The likelihood for informalization is higher for individuals with incomplete primary education than for illiterate individuals, which is surprising. But keeping in mind that the DV represents active labor market participants among the informals, it is not unlikely that the illiterate are unemployed. The slope declines most steeply at the point of complete secondary education so that it appears as a reasonable cut-off point for the identification of those informals who have the discretion to choose between the formal and informal labor markets.

Coming from a low-income household and a family background with low-educated parents also highly determines the likelihood for informalization. As expected, the more educated the parents the lower the likelihood of an individual becoming a self-employed informal. One could argue that income and education reinforce each other because both variables are undoubtedly related. Higher education is likely to go together with higher

Level of Education

¹⁷The plot is based on average marginal effects for the predicted probabilities of education, showing the incidence rate for informalization at different levels of education.

income. But testing education and income in separate models and also with a different specification of income¹⁸ only increases the respective effect of each variable. Both lower levels of education and lower income therefore increase the probability of informalization.

#### 4.6.2 The Exit Seekers: Perception of the Government

Seizing the exit strategy of entering the informal labor market appears only a reasonable option to individuals who possess enough bargaining power to make such a decision – the potential 'exit seekers.' Therefore, I focus the analysis on individuals who have at least a complete secondary education, taken from the findings shown in Figure 4.3. Age, marital status, religiosity, trust, and the perception of an unfair income distribution do not significantly affect chances of becoming informally self-employed so that these variables are left out of the following estimations, given the priority of a parsimonious explanation¹⁹.

	(M 3)	(M 4)	(M 5)	(M 6)	(M 7)	(M 8)
DV: informalization						
Micro Predictors						
Education	$-0.440^{***}$	$-0.439^{***}$	$-0.441^{***}$	$-0.439^{***}$	$-0.442^{***}$	$-0.441^{**}$
	(0.044)	(0.043)	(0.043)	(0.044)	(0.043)	(0.043)
Female	$-0.679^{***}$	$-0.685^{***}$	$-0.683^{***}$	$-0.685^{***}$	$-0.683^{***}$	$-0.684^{***}$
	(0.061)	(0.061)	(0.061)	(0.061)	(0.061)	(0.061)
Parents' edu.	$-0.087^{***}$	$-0.087^{***}$	$-0.087^{***}$	$-0.087^{***}$	$-0.087^{***}$	$-0.087^{**}$
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Income	$-0.200^{***}$	$-0.198^{***}$	$-0.190^{***}$	$-0.196^{***}$	$-0.190^{***}$	$-0.192^{**}$
	(0.038)	(0.038)	(0.038)	(0.038)	(0.038)	(0.038)
State capture	$0.034 \\ (0.070)$					
Tax morale	0.159+	0.154+	0.151+	0.154+	0.153+	0.152+
	(0.086)	(0.086)	(0.086)	(0.086)	(0.086)	(0.086)
Pub. edu. dissatisfaction	$0.088^{*}$	$0.075^{*}$	$0.076^{*}$	$0.074^{*}$	$0.074^{*}$	$0.074^{*}$
	(0.036)	(0.037)	(0.037)	(0.037)	(0.037)	(0.037)
Unfair income distribution	0.020	-0.014				

Table 2: Logistic Hierarchical Random-Intercept Regression: The Exit Seekers

¹⁸See supplementary material, Table A.

¹⁹Data for social spending is missing for Venezuela so that N is reduced. These variables are neither significant in the reduced sample.

	(0.077)	(0.077)				
Confidence in gov't		$-0.089^{**}$ (0.035)	$-0.083^{*}$ (0.034)	-0.088** (0.034)	$-0.085^{*}$ (0.034)	$-0.086^{*}$ (0.034)
Macro Predictors						
Institutional quality			$-0.124^{**}$ (0.042)			
Social spending pc				-0.000 (0.000)		
Pension coverage					$-0.013^{*}$ (0.006)	
Mortality rate (neonatal)						$0.046^{*}$ (0.021)
Year	$-0.205^{***}$ (0.059)	$-0.205^{***}$ (0.059)	$-0.205^{***}$ (0.059)	-0.200** (0.061)	$-0.205^{***}$ (0.059)	-0.184** (0.060)
Constant	$1.088^{***}$ (0.275)	$1.378^{***}$ (0.294)	$1.381^{***}$ (0.280)	$1.410^{***}$ (0.315)	$1.784^{***}$ (0.338)	$0.844^{*}$ (0.370)
Random Effects Parameters						<u> </u>
Var (constant)	$0.186 \\ (0.072)$	$\begin{array}{c} 0.179 \\ (0.069) \end{array}$	$0.111 \\ (0.047)$	$0.174 \\ (0.069)$	$\begin{array}{c} 0.131 \\ (0.504) \end{array}$	$\begin{array}{c} 0.132 \\ (0.503) \end{array}$
N Level 1	11298	11298	11298	11298	11298	11298
N Level 2	17	17	17	17	17	17
Wald Chi ²	355.08	360.85	370.06	361.04	366.26	366.14
Log Likelihood	-3969.24	-3966.03	-3962.58	-3965.99	-3963.93	-3963.97
BIC	8041.1	8034.7	8027.8	8034.6	8030.5	8030.6
$\pm n < 0.10 * n < 0.05 ** n$	<0.01 ***	n < 0.001				-

+ p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001Source: LAB 2009, 2010; CEPAL (2013); WDI World Bank (2013*b*);

Rofman et al. (2008); WGI World Bank (2012);

Note: The sample only includes the "exit seekers" – the previously determined voluntary informal workers. The sample is reduced to respondents with at least completed secondary education.

Estimation results displayed in Table 2 support hypothesis five. Dissatisfaction with public education exerts a positive impact on informalization at the 5% level of significance (M3). A similar reversed effect is detected for confidence in the government in terms of scope. The probability of informalization decreases when trust in the government is high (M4). Perceiving the state as captured by elites does not significantly influence informalization. Findings are robust in separate tests of state capture, confidence in the government and dissatisfaction with public education (see supplementary material, Table B). Trust in the government and satisfaction with how public goods are provided or implemented affect the probability of entering the informal labor market for those

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individuals who have at least complete secondary education and, hence, greater discretion about their labor market 'choice'.

Turning briefly to further controls that have been addressed above, I find an effect for gender and individual tax morale and also for education and income. If individuals think that tax evasion is justifiable, it increases the likelihood of becoming informally self-employed at a 10% level of significance. This is a very intuitive finding and supports the argument that lower tax morale at the individual level also facilitates informalization. That being female decreases the likelihood of entering the informal sector is not surprising when we consider the measurement of informality in this analysis. Because of the limitations of the survey data, this analysis focuses on informal workers and not on informals in the general society. Not all women who work in the informal sector are captured by the measurement of informal employment as applied here. The gender coefficient therefore needs to be treated with care.

#### 4.6.3 The Exit Seekers: Public Transfers and Institutional Quality

Finally, I now turn to the context effect of actual governmental performance displayed in Table 2, testing the effect of welfare provision (per capita public social spending; pension coverage and neonatal mortality rate) and the quality of the institutional framework for the group of informals that possess sufficient bargaining power. If informalization can be considered as a 'vote' against the status quo of the welfare state, then we should find strong effects from these factors. A better institutional framework, including for instance a well-functioning rule of law and higher political accountability, decreases the likelihood of informalization at the 1% level of significance in M5 (Table 2). The low BIC value of M5 additionally strengthens the argument. The effect remains robust when further macro controls for labor demography are added in Table 3 (M9-M12) . Neither unemployment nor the informal economy influence the likelihood to go underground.

	(M 9)	$(M \ 10)$	(M 11)	(M 12)
DV: informalization			. ,	
Micro Predictors				
Education	-0.441***	-0.440***	-0.442***	-0.441***
	(0.043)	(0.044)		(0.044)
Female	-0.682***	-0.684***	-0.682***	-0.683***
	(0.061)	(0.061)	(0.061)	(0.061)
Parents' edu.	-0.087***	-0.087***	-0.087***	-0.086***
	(0.018)	(0.018)	(0.018)	(0.018)
Income	-0.189***	-0.196***	-0.189***	-0.193***
	(0.038)	(0.038)	(0.038)	(0.038)
Confidence in gov't	-0.083*	-0.088**	-0.084*	-0.085*
	(0.034)	(0.034)	(0.034)	(0.034)
Tax morale	0.151 +	0.154 +	0.153 +	0.152 +
	(0.086)	(0.086)	(0.086)	(0.086)
Pub. edu. dissatisfaction	$0.077^{*}$	$0.075^{*}$	$0.075^{*}$	$0.075^{*}$
Maana Duadiatana	(0.037)	(0.037)	(0.037)	(0.037)
Macro Predictors				
Institutional quality	$-0.122^{**}$ (0.045)			
Social spending pc		0.000 (0.000)		
<b>.</b>		(0.000)		
Pension coverage			$-0.014^{*}$ (0.007)	
			(0.001)	o o ook
Mortality rate (neonatal)				$0.060^{*}$ (0.027)
				· · · ·
Unemployment rate	-0.033	-0.035	-0.046	-0.057
	(0.035)	(0.040)	(0.038)	(0.039)
Informal economy	0.001	0.007	-0.001	-0.006
	(0.008)	(0.010)	(0.009)	(0.010)
Year	-0.169*	-0.168*	-0.155*	-0.116
	(0.070)	(0.076)	(0.072)	(0.076)
Constant	1.573**	1.340*	2.218**	1.331*
	(0.522)	(0.673)	(0.689)	(0.530)

Table 3: Additional Controls

Continued on Next Page...

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Var (constant)	0.113	0.173	0.133	0.134
	(0.049)	(0.070)	(0.056)	(0.055)
N Level 1	11298	11298	11298	11298
N Level 2	17	17	17	17
Wald $Chi^2$	370.49	362.65	367.22	367.65
Log Likelihood	-3962.04	-3965.11	-3963.11	-3962.85
BIC	8045.4	8051.5	8047.6	8047.0

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Source: LAB 2009, 2010; CEPAL; WGI (World Bank 2012); Schneider et al. (2010); Rofman et al. (2008); World Bank (2013b); Standard errors are in parentheses; Note: The sample only includes the "exit seekers" – the previously determined voluntary informal workers. The sample is reduced to respondents with at least completed secondary education.



Figure 4.4 Predictive Margins of Institutional Quality

I plot the predictive marginal effect of institutional quality on informalization in Figure 4.4 using average marginal effects of the model (M5) with 95% confidence intervals. The figure shows that the slope is steadily declining, meaning that the probability of becoming informally self-employed declines from 16% with increasing institutional quality to 6%. Hypothesis three finds empirical support. The level of welfare provision does not enter the utility function of the individual (M6). In contrast, higher pension coverage decreases the likelihood to informalize, while a higher neonatal mortality rate exerts a positive

effect on informalization (Table 3 M9 and M10). This finding speaks for the hypothesized mechanism, that a more generous welfare state decreases the incentive for the individual to informalize (particularly when benefits are bound to formal employment as we see in the pension coverage rate), but it could also be a simple effect of an improvement in human capital that increases the employability of individuals. Given the abstraction level of social spending data and the proxies, further research on concrete public transfers and welfare programs is needed to draw firm conclusions. Hypothesis four is partially supported for now.

#### 4.6.4 Sensitivity Tests

In order to assess the stability of the findings, I add further macro level variables that have been identified as theoretically relevant factors. Among these are labor market institutions captured by minimum wage and severance pay and the tax burden. Moreover, I test two alternative specifications of institutional quality: impartiality, taken from the expert survey of Teorell et al. (2011) (see Table 4 M16 and M17), and corruption (CPI) (M18 and M19).

		Table 4:	Robustness	Test			
	(M 13)	(M 14)	(M 15)	(M 16)	(M 17)	(M 18)	(M 19)
DV: informalization							
Micro Predictors							
Education	-0.439***	$-0.441^{***}$	-0.439***	$-0.428^{***}$	-0.425***	-0.440***	-0.439***
	(0.046)	(0.046)	(0.046)	(0.044)	(0.046)	(0.043)	(0.046)
Female	-0.634***	-0.634***	-0.636***	-0.678***	-0.627***	-0.684***	-0.635***
	(0.063)	(0.063)	(0.063)	(0.061)	(0.064)	(0.061)	(0.063)
Parents' edu.	-0.075***	-0.076***	-0.076***	-0.088***	-0.076***	-0.087***	-0.076***
	(0.019)	(0.019)	(0.019)	(0.018)	(0.019)	(0.018)	(0.019)
Income	-0.209***	-0.207***	-0.213***	-0.199***	-0.220***	-0.194***	-0.213***
	(0.040)	(0.040)	(0.040)	(0.038)	(0.040)	(0.038)	(0.040)
Confidence in gov't	-0.077*	-0.076*	-0.080*	-0.081*	-0.074*	-0.085*	-0.079*
0	(0.036)	(0.036)	(0.036)	(0.034)	(0.036)	(0.034)	(0.036)
Tax morale	0.133	0.135	0.133	0.157 +	0.139	0.152 +	0.134
	(0.091)	(0.091)	(0.091)	(0.087)	(0.093)	(0.086)	(0.091)
Pub. edu. dissatisfaction	0.101**	0.100**	0.100**	$0.075^{*}$	0.102**	$0.074^{*}$	0.101**
	(0.038)	(0.038)	(0.038)	(0.037)	(0.039)	(0.037)	(0.038)

Table 4. Dabaata are Taat

Continued on Next Page...

Macro Predictors institutional quality	$-0.146^{***}$ (0.039)						
Tax burden	$0.031^{*}$ (0.014)	$0.038^{*}$ (0.016)	0.024 (0.017)		$0.012 \\ (0.020)$		0.023 (0.016)
Severance pay (5 years)	-0.013 (0.015)	-0.003 (0.016)	-0.007 (0.019)		-0.017 (0.018)		-0.010 (0.018)
Minimum wage	-0.000 (0.001)	$0.000 \\ (0.001)$	$0.000 \\ (0.001)$		$0.001 \\ (0.001)$		-0.000 (0.001)
Year	$-0.224^{***}$ (0.062)	$-0.224^{***}$ (0.062)	$-0.197^{**}$ (0.063)	$-0.206^{***}$ (0.060)	$-0.225^{***}$ (0.063)	$-0.212^{***}$ (0.059)	$-0.228^{***}$ (0.062)
Pension coverage		-0.019** (0.006)					
Mortality rate (neonatal)			0.062+ (0.032)				
Impartiality				-0.223 (0.179)	-0.177 (0.220)		
Corruption						0.126+ (0.071)	0.136+ (0.072)
Constant	$1.008^{*}$ (0.509)	$1.186^{*}$ (0.522)	$\begin{array}{c} 0.223 \\ (0.786) \end{array}$	$\begin{array}{c} 1.254^{***} \\ (0.294) \end{array}$	$1.028 \\ (0.656)$	$\begin{array}{c} 0.562 \\ (0.534) \end{array}$	$0.173 \\ (0.806)$
Random Effects Param				a a a tababab			
Var (constant)	$-1.351^{***}$ (0.238)	$-1.290^{***}$ (0.235)	$-1.099^{***}$ (0.211)	$-0.984^{***}$ (0.203)	$-1.143^{***}$ (0.216)	$-0.983^{***}$ (0.203)	$-1.126^{***}$ (0.218)
N Level 1	10553	10553	10553	10818	10073	11298	10553
N Level 2	16	16	16	16	15	17	16
Wald Chi ²	330.03	326.48	317.81	352.23	306.54	364.57	318.01
Log Likelihood	-3621.46	-3622.55	-3624.80	-3870.62	-3530.43	-3964.65	-3624.97
BIC	7372.6	7374.8	7379.3	7843.4	7189.9	8032.0	7379.6
L == <0.10 * == <0.05 **	<0.01 ***	<0.001					

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001 LAB 2009, 2010; World Bank (2012); World Bank (2013a/b); Rofman et al. 2008;

Teorell et al. (2011); Gómez-Sabaini and Jiménez (2012); TÍ (2013);

Standard errors are in parentheses;

Note: The sample only includes the "exit seekers" – the previously determined voluntary informal workers. The sample is reduced to respondents with at least completed secondary education. Bolivia drops out because of a missing value for severance pay. Information for impartiality is not available for Panama.

The findings for the institutional quality effect remains robust. In the fully specified model (M13) the coefficient is significant at the 0.01% level. When we consider the level of corruption instead of institutional quality, which are both highly correlated, we find a similar effect; higher corruption increases the likelihood of informal self-employment (M18 and M19). Only impartiality does not show a significant impact (M16 and M17). The tax burden positively influences the likelihood of informalization which is in line

with theoretical expectations, while neither minimum wage nor severance pay have a significant influence. The individual level effects following dissatisfaction with public education and confidence in the government remain strongly robust.

#### 4.7 Conclusion

The article set out to elicit how far informalization is a direct function of social policy discontent, building a micro foundation for informalization. Education, parental background, and household income mostly determine informalization, which can be explained with lower bargaining power in the labor market and the difficulty of those with low education levels to find formal employment because most formal occupations are in the public administration or in the high-skill sector where higher education levels are a prerequisite for employment. For the more powerful labor market group of informals that have greater discretion to choose between formal and informal labor – individuals with at least complete secondary education – I find positive results for the intuition that informalization is to some part a consequence of social policy discontent. Dissatisfaction with public goods provision or distrust in the state translates into observable behavior by increasing the likelihood of entering the informal labor market. A dysfunctional institutional framework, lower health care coverage reflected by the neonatal mortality rate, and corruption also raise the likelihood of informalization. Greater welfare coverage in terms of pensions lowers the probability to become an informal worker. Findings reveal that informalization is indeed to some degree a 'vote' against the state. But the effects are weaker compared to the education and income effect. However, we need to keep in mind that the analysis does not encompass all types of informal wages earners because of the limitations of the survey. In order to make clear inferences about the motives for informalization, further research on the entire group of informal sector workers and also on more specific welfare programs is needed.

## 4.8 Appendix

Table A	Descriptive	Statistics
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Variable	Observations	Mean	Std. Dev.	Min	Max
Informal worker	29732	0.17	0.38	0	1
Education	29732	3.90	1.75	1	7
Female	29732	0.51	0.50	0	1
Parents' edu.	29732	2.83	1.72	1	7
Religiosity	29732	2.22	1.15	0	4
Age	29732	39.23	16.00	16	96
Married	29732	0.58	0.49	0	1
Income	29732	1.07	0.98	-2.27	2.85
Trust	29732	0.21	0.41	0	1
Unfair Income Distribution	29732	0.78	0.41	0	1
State capture	29732	0.67	0.47	0	1
Confidence in gov't	29732	2.37	0.97	1	4
Pub. edu. dissatisfaction	29732	2.50	0.89	1	4
Tax morale	29732	0.13	0.34	0	1
Institutional quality	29732	-0.02	2.22	-3.70	5.26
Unemployment rate	29732	7.95	2.32	4.1	14.9
Minimum wage	29732	199.46	99.02	0.00	379.79
Severance pay (5 years)	26288	19.01	5.41	8.3	27.1
Tax burden	29732	19.09	6.59	10.7	34.4
Corruption (CPI)	29732	6.47	1.38	3.1	8.1
Social spending per capita	28111	662.07	500.60	117	1601
Impartiality	28516	-0.41	0.58	-1.48	0.70
Pension coverage	29732	33.43	16.32	12.50	62.68
Mortality rate (neonatal)	29732	10.98	4.40	4.80	24.00
Informal Economy	29732	38.10	12.26	18.50	63.50
Year	29732	0.51	0.50	0	1

Source: LAB 2009, 2010; CEPAL; World Bank (2012); World Bank (2013a/b); Teorell et al. (2011); Gómez-Sabaini and Jiménez (2012); Schneider et al. 2010; Rofman et al. 2008; TI (CPI);

## 4.9 Supplementary Material

cation and Income				
	(M 20)	(M 21)	(M 22)	(M 23)
Micro Predictors				
Education	$-0.142^{***}$ (0.011)		$0.466^{***}$ (0.048)	$0.443^{***}$ (0.048)
Income		$-0.154^{***}$ (0.019)	$-0.089^{***}$ (0.021)	
$Education^2$			$-0.077^{***}$ (0.006)	$-0.076^{***}$ (0.006)
Female	$-0.676^{***}$ (0.033)	$-0.672^{***}$ (0.033)	$-0.679^{***}$ (0.033)	$-0.677^{***}$ (0.033)
Parents edu.	$-0.085^{***}$ (0.012)	$-0.117^{***}$ (0.012)	$-0.063^{***}$ (0.013)	$-0.075^{**}$ (0.012)
Religiosity	-0.013 (0.015)	-0.015 (0.015)	-0.014 (0.015)	-0.016 (0.015)
Age	$-0.002^{*}$ (0.001)	$0.001 \\ (0.001)$	$0.001 \\ (0.001)$	$0.001 \\ (0.001)$
Married	$0.007 \\ (0.033)$	$\begin{array}{c} 0.006 \ (0.033) \end{array}$	-0.001 (0.033)	-0.003 (0.033)
Trust	-0.026 (0.040)	-0.027 (0.040)	-0.014 (0.040)	-0.015 (0.040)
Tax morale	$0.131^{**}$ (0.046)	$0.125^{**}$ (0.046)	$0.115^{*}$ (0.047)	$0.120^{*}$ (0.047)
Unfair income distribution	0.044 (0.039)	$\begin{array}{c} 0.036 \ (0.039) \end{array}$	$0.048 \\ (0.039)$	$\begin{array}{c} 0.049 \\ (0.039) \end{array}$
Year	$-0.071^{*}$ (0.032)	$-0.072^{*}$ (0.032)	$-0.068^{*}$ (0.032)	$-0.066^{*}$ (0.032)
Constant	$-0.495^{***}$ (0.127)	$-0.895^{***}$ (0.118)	$-1.597^{***}$ (0.153)	$-1.543^{***}$ (0.155)
Random Effects Parameters Var (constant)	0.162 (0.056)	0.143 (0.050)	0.173 (0.060)	0.161 (0.056)
N Level 1	29732	29732	29732	29732

Table A: Logistic Hierarchical Varying-Intercept Regression: Education and Income

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N Level 2	18	18	18	18
Wald Chi ²	790.93	709.29	888.93	907.04
Log Likelihood	-12883.14	12928.76	12800.52	12791.25
BIC	25889.9	25981.1	25726.7	25734.9

	(M 24)	(M 25)	(M 26)
Micro Predictors			
Education	$-0.437^{***}$	-0.440***	-0.436***
	(0.043)	(0.043)	(0.043)
Female	-0.678***	-0.679***	-0.685***
	(0.061)	(0.061)	(0.061)
Parents' edu.	-0.086***	-0.087***	-0.086***
	(0.018)	(0.018)	(0.018)
Income	-0.198***	-0.200***	-0.196***
	(0.038)	(0.038)	(0.038)
State capture	0.047		
	(0.070)		
Tax morale	0.154 +	0.158 +	0.150 +
	(0.086)	(0.086)	(0.086)
Unfair income distribution	0.039	0.026	-0.001
	(0.077)	(0.076)	(0.077)
Pub. edu. dissatisfaction		0.090*	
		(0.036)	
Confidence in gov't			-0.100**
0			(0.034)
Year	-0.199***	-0.205***	-0.200***
	(0.059)	(0.059)	(0.059)
Constant	1.263***	1.099***	1.561***
	(0.266)	(0.274)	(0.280)
Random Effects Parameters			
Var (constant)	0.193	0.186	0.183
	(0.074)	(0.072)	(0.071)
N Level 1	11298	11298	11298
N Level 2	17	17	17
Wald Chi ²	349.86	354.85	357.17
Log Likelihood	-3972.79	-3969.36	-3968.10
BIC	8037.7	8032.1	8029.5

Table B: The Exit Seekers: Separate Use of Perception Variables

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Source: LAB 2009, 2010; Standard errors are in parentheses;

Sample is reduced to respondents with at least complete secondary education.

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$\begin{array}{c} -0.440^{***} \\ (0.043) \\ -0.771^{***} \\ (0.061) \\ -0.102^{***} \\ (0.018) \\ -0.209^{***} \\ (0.038) \\ -0.082^{*} \\ (0.033) \end{array}$	$\begin{array}{c} -0.441^{***} \\ (0.043) \\ -0.770^{***} \\ (0.061) \\ -0.102^{***} \\ (0.018) \\ -0.208^{***} \\ (0.038) \\ -0.082^{*} \\ (0.032) \end{array}$	$\begin{array}{c} -0.443^{***} \\ (0.048) \\ -0.718^{***} \\ (0.067) \\ -0.096^{***} \\ (0.020) \\ -0.205^{***} \\ (0.042) \\ 0.0044^{*} \end{array}$
(0.043) -0.771*** (0.061) -0.102*** (0.018) -0.209*** (0.038) -0.082*	$\begin{array}{c} (0.043) \\ -0.770^{***} \\ (0.061) \\ -0.102^{***} \\ (0.018) \\ -0.208^{***} \\ (0.038) \\ -0.082^{*} \end{array}$	$\begin{array}{c} (0.048) \\ -0.718^{***} \\ (0.067) \\ -0.096^{***} \\ (0.020) \\ -0.205^{***} \\ (0.042) \end{array}$
-0.771*** (0.061) -0.102*** (0.018) -0.209*** (0.038) -0.082*	-0.770*** (0.061) -0.102*** (0.018) -0.208*** (0.038) -0.082*	$\begin{array}{c} -0.718^{***} \\ (0.067) \\ -0.096^{***} \\ (0.020) \\ -0.205^{***} \\ (0.042) \end{array}$
(0.061) -0.102*** (0.018) -0.209*** (0.038) -0.082*	$(0.061) \\ -0.102^{***} \\ (0.018) \\ -0.208^{***} \\ (0.038) \\ -0.082^{*}$	$(0.067) \\ -0.096^{***} \\ (0.020) \\ -0.205^{***} \\ (0.042) \\ \end{cases}$
-0.102*** (0.018) -0.209*** (0.038) -0.082*	-0.102*** (0.018) -0.208*** (0.038) -0.082*	-0.096*** (0.020) -0.205*** (0.042)
(0.018) -0.209*** (0.038) -0.082*	(0.018) -0.208*** (0.038) -0.082*	(0.020) - $0.205^{***}$ (0.042)
-0.209*** (0.038) -0.082*	-0.208*** (0.038) -0.082*	$-0.205^{***}$ (0.042)
(0.038) - $0.082^*$	(0.038) - $0.082^*$	(0.042)
-0.082*	-0.082*	
		0.004*
(0.033)	(0 `	-0.094*
	(0.033)	(0.038)
$0.187^{*}$	$0.186^{*}$	0.131
(0.085)	(0.085)	(0.095)
0.070 +	0.071 +	$0.083^{*}$
(0.036)	(0.037)	(0.040)
-0.012	-0.012	0.006
(0.017)	(0.018)	(0.024)
	-0.049	
	(0.042)	
	0.005	
	(0.009)	
		0.008
		(0.023)
		-0.016
		(0.027)
		0.000
		(0.001)
-0.172**	-0.118	-0.221***
(0.060)	(0.075)	(0.066)
2.753	2.965	0.828
(1.985)	(2.147)	(2.406)
-0.881	-0.873	-0.933
	(0.085) 0.070+ (0.036) -0.012 (0.017) $-0.172^{**}$ (0.060) 2.753	$\begin{array}{cccc} (0.085) & (0.085) \\ 0.070+ & 0.071+ \\ (0.036) & (0.037) \\ \end{array}$ $\begin{array}{c} -0.012 & -0.012 \\ (0.017) & (0.018) \\ & -0.049 \\ (0.042) \\ & 0.005 \\ (0.009) \\ \end{array}$ $\begin{array}{c} -0.075 \\ (0.009) \\ \end{array}$

Table C: The Exit Seekers: School Enrollment

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	(0.195)	(0.207)	(0.209)
N Level 1	11473	11473	9792
N Level 2	17	17	15
Wald $Chi^2$	405.29	407.13	315.9
Log Likelihood	-3973.78	-3972.66	-3280.05
BIC	8050.4	8066.9	6688.7

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Source: LAB 2009, 2010; World Bank (2013a/b); UNESCO (2013) Schneider et al. 2010; Gómez-Sabaini and Jiménez (2012); CEPAL (2013); Standard errors are in parentheses; Sample is reduced to respondents with at least complete secondary education.

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100 260	v					
	(M 30)	(M 731	(M 32)	(M 33)	(M 34)	(M 35)
Micro Predictors						
Education	-0.439***	-0.442***	-0.440***	-0.450***	-0.451***	-0.450***
Education	(0.043)	(0.043)	(0.043)	(0.044)	(0.044)	(0.044)
	(0.043)	(0.045)	(0.045)	(0.044)	(0.044)	(0.044)
Female	-0.685***	-0.684***	-0.685***	-0.690***	-0.690***	-0.691***
remale						
	(0.061)	(0.061)	(0.061)	(0.061)	(0.061)	(0.061)
Parent's edu.	-0.086***	-0.087***	-0.087***	-0.087***	-0.087***	-0.087**
i arent s euu.		(0.018)				
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Income	-0.195***	-0.191***	-0.197***	-0.187***	-0.187***	-0.190**
meome						
	(0.038)	(0.038)	(0.038)	(0.039)	(0.039)	(0.039)
Confidence in	-0.083*	-0.083*	-0.087**	-0.082*	-0.083*	-0.085*
	(0.033)	(0.034)		(0.032)	(0.034)	(0.034)
gov't	(0.054)	(0.054)	(0.034)	(0.054)	(0.054)	(0.054)
Tax morale	0.152 +	0.154 +	0.152 +	0.142	0.144	0.143
Tax morate	(0.086)	(0.086)	(0.086)	(0.088)	(0.088)	(0.088)
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Pub. edu.	$0.075^{*}$	$0.072^{*}$	$0.073^{*}$	$0.075^{*}$	0.073*	0.072 +
dissatisfaction	(0.036)	(0.036)	(0.037)	(0.037)	(0.037)	(0.037)
dissatisfaction	(0.050)	(0.050)	(0.031)	(0.057)	(0.031)	(0.001)
Macro Predictors						
Quality of insti.	-0.150***			-0.134**		
Quality of filsti.						
	(0.037)			(0.045)		
Tax burden	0.032**	0.041***	0.024 +			
Tax buruen						
	(0.012)	(0.012)	(0.014)			
Pension		-0.019***			-0.013*	
		(0.005)			(0.006)	
coverage		(0.005)			(0.000)	
Mortality rate			$0.050^{*}$			$0.053^{*}$
v			(0.030)			
(neonatal)			(0.020)			(0.024)
Job security				-0.030	-0.022	-0.035
index				(0.128)	(0.143)	(0.143)
IIIUCA				(0.120)	(0.143)	(0.143)
Year	-0.204***	-0.204***	-0.181**	-0.203***	-0.203***	-0.178**
	(0.059)	(0.059)	(0.060)	(0.060)	(0.060)	(0.061)
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)
Constant	$0.769^{*}$	$1.245^{***}$	0.356	$1.544^{**}$	1.931**	0.947 +
	(0.353)	(0.354)	(0.454)	(0.492)	(0.623)	(0.509)
Random Effects P	· /	(1001)	(101)	(0.102)	(0.020)	(0.003)
Var (constant)	-1.321	-1.331	-1.100	-1.092	-0.993	-1.007
var (constant)	-1.041	-1.001	-1.100	-1.034	-0.330	-1.001

Table D: Logistic Hierarchical Regression: The Exit Seekers and Job Security

Continued on Next Page...

	(0.222)	(0.232)	(0.202)	(0.216)	(0.210)	(0.208)
N Level 1	11298	11298	11298	11049	11049	11049
N Level 2	17	17	17	16	16	16
BIC	8030.6	8031.4	8037.0	7854.2	7857.2	7856.8
	and the second states					

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Source: Latinobarometer 2009, 2010; CEPAL; Heckman and Pagés (2000); World Bank (2012); Gómez-Sabaini and Jiménez (2012); CEPAL (2013); Rofman et al. (2008); World Bank (2013a/b); Standard errors are in parentheses; Sample is reduced to respondents with at least complete secondary education.

## Chapter 5

## Conclusion

Individual social policy preferences do not form in void but are influenced by the structural context of the state and the economy. This is why we need to take into account the variation in the countries' capacities to manage welfare provision and the task of redistribution, particularly when we try to understand preference formation in low- and middle-income democracies. Individuals recognize the capacity of the state to handle this task and are aware of inefficiencies in the form of the informal sector. As uncertainty in the reliability of welfare provision increases, individuals are more likely to turn away from the state and prefer alternative options such as a private welfare provider or the informal economy as form of an exit option. Economic risks are unevenly distributed in the labor market due to its fragmentation into formal and informal employment and the welfare systems in low- and middle-income democracies struggle to address these insufficiencies. In order to understand the welfare system of low- and medium income democracies and the role that the government plays in terms of providing social protection, researchers need to delve deeper into the preference structure that reliably captures the economically active population, where contributions, benefits, and the decision for insurance against sickness and age matter the most. Considering the large extent to which workers are situated in the informal sector in developing countries, studying social policy preferences will be incomplete if motives and demands of this central part of the population are left out of the theoretical framework. In a major number of low- and middle income states composes the informal economy of more than 40% of the countries' GDP (Schneider et al., 2010). The analyses revealed that the stratification of the labor markets in Latin

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America influence social policy preferences by inducing various forms of withdrawal from welfare expectations of the state at the individual level. But this study is only a first step towards a more fine-grained understanding of the micro foundation of welfare preferences in less developed democracies. The mechanism begs further exploration that is particularly bound to date by the lacking sensitivity of the data and data availability in general.

In this final section I therefore intend to give a prospect on where to go from here, starting with a suggestion on measurement issues. The analyses in this study make use of public opinion data in order to assess individuals' preferences about the welfare state. Nevertheless, standardized surveys also come with obstacles and shortcomings because closed items can only approximate the 'real' attitude or preference of the individual, depending on the survey design. Often items are framed in a way that do not allow the individual to express indifference, they include multiple dimensions, or lack a clear reference line for the individual (for a thorough discussion of difficulties of survey design and measurement see Groves et al., 2009). Individuals can also struggle with crosspressures from contrasting ideological beliefs, what Feldman and Zaller (1992, 270) call "value conflict", as the authors have detected for public policy attitudes in the U.S. in the early 1990's, which can influence responses on survey items. According to Goerres and Prinzen (2012) individuals are not always consistent with their attitude¹ and sometimes consent to an item without actually having elaborated an informed opinion on the issue. The authors critically discuss the implications of survey shortcomings for social policy preference research and make recommendations how to improve the measurement of welfare attitudes such as using vignettes (individuals are given hypothetical scenarios in the survey) or the "contingent valuation method" that forces the individual to balance the benefit of a certain policy and the personal income when taxes are deducted (see Goerres and Prinzen (2012), 529). The recent contribution to the academic discourse on social policy preferences of Barber et al. (2013) addresses concretely this issue with an experimental approach, contesting the behavioral foundations of the standard approaches

 $^{^{1}}$ Harbers et al. (2012, 5) address the issue of "attitude variability" in a study on political preferences in Latin America.

in political economy theory. It is so far difficult to differentiate between the redistributive and insurance effect of a certain welfare policy for the individual with public opinion data, since the survey items are usually not sensitive enough to tease out the exact mechanism (Barber et al., 2013). What lies ahead in this field of research is a more extensive use of field experiments and experimental surveys. What is particularly problematic for welfare preference research in low- and middle-income economies is the availability of information for individuals on these complex policies that can have far reaching implications (see Carnes and Mares, 2013). It is difficult for individuals to link the effect of a certain social policy to one's own income at current state and even more difficult, to relate it to future income when also taking a possible insurance effect into account. A promising approach might therefore be the use of charts and graphical illustrations in a survey to provide the respondent with information about gains and costs of redistributive politics. Illustrating the trade-off graphically facilitates comprehension of this complex issue. Also increased usage of priming experiments would facilitate the identification of the mechanism for social policy preferences.

A further issue that needs consideration in future research on welfare preferences in low- and middle-income states is the socio-economic group of women (Gideon and Molyneux, 2012, have recently published a special issue on gender in social policy in Latin America). It is the group of individuals whose bargaining power has been much more increased through CCTs in the last decade (Fiszbein et al., 2009), as it is often the female head of the household who receives the transfer. But there are also critical voices who counter these claims by emphasizing that despite a strengthened position in the household, CCTs also reinforce the position of women to *stay* in the household doing domestic work (Franzoni and Voorend, 2012). Hence, by hindering women from joining the labor force gender inequality becomes manifested in more rigid social structures. Additionally, we need to adjust the level of analysis not only to the individual but also to the household level. Women, who work in the informal sector, are sometimes insured through the working partner which should affect their social policy preferences through this intra-family pooling of risks.

Next to options that allow to delve deeper into social policy preference formation, the

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dissertation emphasizes the need to pay closer attention to the group of informal workers in general as it is a large social group in Latin American societies whose mobilization can be highly valuable for policy makers. In chapter 3 I only briefly alluded to differences in political party preferences of informal and formal workers. So far, it has not been examined if informal workers vary systematically in their party choice regarding different party families and their social policy programs, in Latin America or in low- and middleincome countries in general, while this strand of research currently entails very much attention for the OECD context (see Häusermann and Schwander, 2012; Marx and Picot, 2013; Marx, 2013; Häusermann et al., 2013). First of all, it needs to be investigated which parties in Latin America make particular appeals in the design of social policies to labor market insiders – that is formal workers in this context – or labor market outsiders. Considering the amount of voters that are informal wage earners, it would be surprising to see that parties neglect this voter group. The analysis of party preferences according to labor market group in Latin America begs further exploration.

Finally, a further step that needs to follow the work presented above is the analysis of how social policy preferences translate into policy in low- and middle-income states. From welfare demand to enforcing an expansion or reform of social policy is a long and not necessarily linear causal chain, particularly in the context of the so far understudied low- and middle-income democracies, so that the analysis from micro level individual preferences to social policy output in a comparative cross-country setting presents a too big an endeavor for a dissertational project, especially since studies on social policy in low- and middle-income countries are just on the rise. The dissertational thesis focused on the analysis of the first part of the chain – individual social policy preferences – to build a micro foundation for welfare state research in the Global South. Further research needs to pursue how these social policy preferences influence public policy, studying the responsiveness of political parties and the means of implementation.

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#### FORSCHUNGSINTERESSEN

Vergleichende Politische Ökonomie, Sozialpolitik und Umverteilung; Individuelle Präferenzen zu Sozialpolitik; Einkommensungleichheit; Steuerflucht/Informeller Sektor; Entwicklungsökonomie; Entwicklungszusammenarbeit

#### DISSERTATION

# $When \ the \ High-Income \ Country \ Context \ Dissolves - Social \ Policy \ Preferences \ in \ Low- \ and \ Middle-Income \ Democracies$

Das kumulative Dissertationsprojekt untersucht aus komparativer Perspektive am Beispiel von demokratischen Entwicklungsländern, inwieweit Kontexteffekte, wie z.B. strukturelle Unsicherheit, dysfunktionale rechtsstaatliche und fiskalische Kapazitäten, und eine große Anzahl von Beschäftigten in der informellen Wirtschaft auf sozialpolitische Präferenzen Einfluss nehmen. Weiterhin betrachtet die Analyse sozialpolitische Präferenzen nach Arbeitsmarkzugehörigkeit in der formellen und informellen Wirtschaft. Auf der Basis einer quantitativen Untersuchung von wohlfahrtsstaatlicher Nachfrage mithilfe hierarchischer Modelle verbindet die Studie Mikro- und Makrotheorien der Wohlfahrtsstaatsforschung.

#### DISKUSSIONSPAPIERE

- Berens, S.: Social Policy Preferences from a Comparative Perspective. in Begutachtung
- Berens, S.: Public versus Private Welfare Provision. in Bequtachtung
- Berens, S.: Labour Market Stratification and Social Policy in Latin America. in Begutachtung
- Berens, S.: Social Policy and the Informal Sector. in Begutachtung
- Berens, S.: Foreign Aid and Social Spending: How External Revenue Influences the Latin American Welfare Systems. in Bequtachtung

#### METHODEN KOMPETENZ

- *Multilevel Analysis.* Wissenschaftzentrum Berlin für Sozialforschung (WZB), 11.-14. Dezember 2012 Dozent : Prof. Andrew Fullerton Ph. D.
- Design and Analysis of Sample Surveys. Columbia University, SoSe 2012 Dozent: Prof. Andrew Gelman Ph. D.
- Introduction to Structural Equation Modeling with Focus on Cross-Cultural Comparisons. Universität zu Köln, Oktober 2011

Dozenten: Prof. Dr. Elmar Schlüter and Prof. Dr. Peter Schmidt.

- Causal Analysis. Universität zu Köln, SoSe 2011 Lecturer: Prof. Dr. Hans–Jürgen Andreß.
- *Multiple Regression Analysis.* ECPR Summer School in Methods and Techniques, Ljubljana 2011 Dozent: Prof. Dr. Bernhard Kittel.

Applied Microeconometrics – Program Evaluation. Universität zu Köln, WS 2010 Dozent: Prof. Dr. Marco Caliendo.

#### Konferenzbeiträge und Forschungsvorträge

Privatization and Marketization of Social Services and Social Programs. ESPAnet Workshop, Max Planck Institute for the Study of Societies, 14.-15. November 2013.

Justice, Taxation and Social Policy, Universität Salzburg, 22.-24. August 2013.

SASE Mailand, 27.-29. Juni 2013

IWEC - Shifting to Post-Crisis Welfare States in Europe? Berlin, 4.-5. Juni 2013

MPSA Chicago, 11.-14. April 2013.

ECPR Joint Sessions, Johannes Gutenberg Universität, Mainz, 11.-16. März 2013. in Panel: Socio-Economic Inequalities and Cleavages in Post-Modern Societies

ECSR/EQUALSOC Conference on Economic Change, Quality of Life and Social Cohesion Poster Session, University of Stockholm, 24.-26. September 2012.

ECPR Graduate Student Conference, Jacobs Universität, Bremen, 4.-6. Juli 2012.

NYU Graduate Student Conference on Political Economy, The Alexander Hamilton Center for Political Economy at New York University, 9. Mai 2012.

Comparative Politics Workshop, Political Science Department, Columbia University, 12. Dezember 2011.

#### LEHRERFAHRUNG

Vergleichende Politikwissenschaft: Das politische System der BRD in vergleichender Perspektive (BA Seminar) Universität zu Köln: WS 2012/2013

#### BERUFLICHE TÄTIGKEITEN

Wissenschaftszentrum Berlin für Sozialforschung (WZB), Wissenschaftliche Hilfskraft, Forschungsgruppe: Markets and Politics – The Future of Fiscal Federalism, Dr. Benny Geys, März 2009 – Juli 2009.

Youth League Department, Municipal Regierung Si Fang District Qingdao – Praktikum, Qingdao, China, Januar – März 2008.

Kyoto Gaidai – University of Foreign Studies, Lehrassistenz für Englisch und Deutsch als Fremdsprache, Kyoto, Japan, April – Juni 2007.

Goethe Institut Osaka – Praktikum, Osaka, Japan, April – Juni 2007.

Deutscher Bundestag – Praktikum, Berlin, März 2006.

#### STIPENDIEN

R. Taylor Cole Scholarship, Duke University, 2009 – 2010. IMPRS-SPCE, Promotionsstipendium 2010 – 2013. DAAD, Reisekostenstipendium

#### WISSENSCHAFTLICHE SOFTWARE

Ŀ₄T _E X	erfahrener Nutzer
STATA	erfahrener Nutzer
R	Grundkenntnisse
SPSS	Grundkenntnisse

#### LANGUAGE SKILLS

Deutsch	Muttersprache
Englisch	verhandlungssicher (TOEFL)
Französisch	verhandlungssicher (DELF $1 + 2$ )
Spanisch	Grundkenntnisse

#### Referencen

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