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The impact of market-oriented reforms on inequality in transitional countries: new evidence from Cuba

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Abstract

In the 1990s, the Cuban government implemented a set of market-oriented reforms in order to cope with the economic crisis caused by the collapse of the Soviet Union. These reforms were followed by a sharp increase in inequality. This rise in inequality can be best understood by looking at what profitable economic exchanges are made possible to which actors by the reforms. Using survey data specifically collected in Havana, we show that new opportunities to accumulate wealth accrue to actors who occupy positions whereby they can legitimately access exchanges that take place in hard currency. This advantage holds for both entrepreneurs and state employees, who work for state-owned enterprises operating in emergent sectors (intrapreneurs), suggesting that the distinction between market and plan is not paramount to explain inequality. Furthermore, actors that do not have legitimate access to exchanges in hard currency benefit from their personal ties to those actors that do.

Key words: economic sociology, social networks, transitional economy, inequality, embeddedness

JEL classification: Z130 economic sociology, P20 socialist systems and transitional economies

1. Introduction

The relationship between institutions and inequality is a classical theme in sociology; the historical transformations leading to the emergence of market structures in formerly socialist economies provided interesting cases to study how institutional change affects the distribution of wealth. This historical opportunity motivated the rise of a wide research program that is known as market transition debate. The market transition literature includes two interrelated research problems that are analytically distinct: the dynamics of institutional

changes and how institutional change affects the distribution of wealth and thereby transforms stratification (Cao and Nee, 2000, cf. p. 1184).

Our study contributes theoretically and empirically to the second research problem: it examines the micromechanisms underlying the rise of inequality in Cuba in the period following the institutional reforms of the early 1990s. Theoretically, we move the focus away from the traditional dichotomy between returns from human versus political capital and, following the new economic sociology approach, we concentrate on the structures that emerge as a consequence of the reforms. We argue that institutional changes are typically grafted onto a pre-existing institutional setting that, in turn, is the result of a historical process. Thus, changes in the distribution of wealth are not a straightforward consequence of the reforms, but rather the end result, often unintended, of a complex process involving changes in the opportunity structure that depend on how modifications of the formal rules interact with individual characteristic, personal relationships and social norms and values. The Cuban reforms unintentionally generated patterns of economic exchange that resemble Zelizer's (2005) *circuits of commerce*. In Cuba, the commercial circuits are associated to social norms regulating the access that, in turn, drive economic benefits toward those who have privileged access. Empirically, the Cuban case has been largely neglected in the market transition debate, possibly due to the lack of statistical data as well as to Cuba's distinctive historical path (see Galbraith (2012) and Whitehead (2007) on Cuba's various anomalies). Moreover, the Cuban case provides an interesting example, because the Cuban reforms were enacted—as an emergency measure—by a government that remained institutionally committed to promote equality among its citizens (Galbraith, 2012). Yet, our data show that, due to differences in the opportunity for profitable exchanges created by the reforms, some categories of actors could profit from the institutional change and began accumulating wealth.

Researchers who studied the implications of institutional change in post-communistic societies generally agree on two important points. First, state socialism is considered a particular type of institutional arrangement in which the integration—in Polanyian terms—of state, economy and society is achieved by means of a wide redistribution of resources (Szelényi, 1978). Accordingly, in a socialist 'redistributive' economy, privileges accrue to a few so-called redistributors (i.e. current or former cadres). Second, it has been observed in various countries that inequality typically tends to increase shortly after centralized redistribution begins to give room to market, well before a full-fledged market economy is in place (Hellman, 1998).

The scientific debate has centered on the transition mechanisms, aiming at identifying those actors who emerge as winners out of the institutional change. The market transition debate was initiated by Nee's (1989) market transition theory. In a nutshell, Nee argued that the introduction of market institutions inherently favors entrepreneurs at the expense of redistributors and leads to higher returns from human capital than under a centrally planned economy. Empirically, support for market transition theory was found in Hungary (e.g. Szelényi, 1988) and rural China (e.g. Nee, 1989, 1991), but in various other post-socialist societies and in urban areas of China the power of cadres did not fade after the transition (Bian and Logan, 1996; Walder, 1996).

Three different arguments have been proposed to account for the resilience of the cadres' power and influence when their formal control over the mechanism of redistribution weakens due to marketization. First, the *technocratic continuity* argument (Róna-Tas, 1994)

claims that the people who hold (or held) political positions in the socialist system succeed in maintaining their privileges during the transition, due to the technocratic expertise that they acquired through their role. Second, Staniszkis (1991) argued that the members of the old elite thrive during market transition by means of *power conversion*, i.e. by simply converting the power accumulated during state socialism into profitable assets in the new market economy (cf. also Róna-Tas, 1994). Third, Nee (1991) described the resilience of cadres' influence as *power persistence*, arguing that during a phase of reforms, the market does not supplant bureaucratic coordination at once, but is rather grafted onto it, creating a segmented system. In such a segmented system, cadres continue to redistribute resources by virtue of their positional power, while market action may reinforce redistributive power (cf. also Bian and Logan, 1996).

Some scholars variously attempted to integrate these different perspectives (Szelényi and Kostello, 1998; Cao and Nee, 2000). However, more generally, there is increasing consensus that looking at market and redistribution as opposite ideal types of resources allocation constitutes a poor basis to predict how inequality changes in transitional economies (Walder, 1996). Market reforms differ enormously in their pace and nature between different countries, as well as between different regions within the same country. Hence, the different socioeconomic and political circumstances in which the reforms take place should not be overlooked (Szelényi and Kostello, 1998; Walder, Luo and Wang, 2013; Zhao and Zhou, 2017). Following this line of argument, for example, Walder *et al.* (2013) argued that changes in the allocation of property rights predict changes in inequality in transition societies. However, as our study shows, the economic benefits of institutional reforms are not necessarily confined to those individuals that are directly affected by changes in the allocation of property rights.

Consistent with the new economic sociology approach, in this article, we focus on emerging market structures, conceived as sets of exchange relationships to which some categories of actors have privileged access. In particular, we show that the effects of marketization on inequality in post-socialist societies can be predicted by looking at what profitable economic exchanges are made possible by the reforms, and which actors occupy the positions that benefit from these exchanges. Focusing on emerging exchange relationships allowed us to provide an accurate description of the Cuban case where reforms remained partial, and to specify the causal mechanism through which newly introduced forms of economic activities interact with the actors' network and normative embeddedness.

In the Cuban case, the effects of the economic crisis following the collapse of the Council for Mutual Economic Assistance (CMEA) were particularly strong because Cuba's international trade was heavily dependent on CMEA partners. In addition, unlike the European post-communist countries that were similarly struck by the economic crisis, Cuba's trading alternatives were severely limited by the economic sanctions imposed by the USA, as well as by the lack of credit from international agencies (e.g. World Bank and IMF). Accordingly, the marketization of some economic sectors was the only possible strategy to attract foreign investments. However, we argue that, in order to isolate these market segments, the Cuban policies created niches in 'structurally semi-independent coexisting economies' (Dominguez, 2004, p. 31)—to which we refer as commercial circuits (Zelizer, 2005)—which segregated the product markets that operate in dollars from those that operate in pesos. Consequently, the reforms had the perverse effect of increasing inequality by benefiting those actors who occupied the niches. From a theoretical point of view, we argue that inequality is affected by

the availability of resources that are embedded in various types of social relationships. Using data from the first quantitative survey ever conducted in Cuba by foreign scholars, we show (a) how the reforms determined the emergence of new exchange relationships that benefited specific categories of actors, thereby causing an increase in inequality and (b) how actors resort to their personal contacts to mitigate inequality. In the conclusion, we will briefly discuss the implications concerning the path of institutional change in Cuba.

2. The emergence of commercial circuits

In the 1990s, after the collapse of the Soviet Union, Cuba's international trade faced a sudden dramatic shrinkage, both in volume and in terms of value. The ensuing economic crisis was exacerbated by the US government's comprehensive economic sanctions and by the internal inefficiency of the Cuban economic system. In that situation of sudden and deep isolation, the Cuban government implemented a set of market-oriented reforms in order to reintegrate Cuba into the global economy.

Between 1990 and 1994, the most remarkable changes included: (a) a partial opening of the Cuban economy to foreign investments; (b) a partial dollarization of specific segments of the economy, leading to monetary duality; (c) an enlargement of the list of jobs that could be carried out by self-employed workers; and (d) a raise in the prices of 'non-essential' products. The depenalization of USD's possession and the legalization of self-employment were approved, among other things, to incorporate part of the widespread informal economy into the formal economy. Nonetheless, these market-oriented reforms were not accompanied by any major political reforms and the Cuban government insisted on presenting them as a 'necessary evil'. The implementation of these market-oriented reforms was thus very cautious and accompanied by a series of adjustments designed to mitigate some of the effects of the earlier liberalizations (Hernández and Domínguez, 2013). Yet, since the so-called 'periodo especial', i.e. the special period, in which the Cuban government relaxed centralized economic planning, economic inequality—which had been previously in steady decline since the 1960s—started to grow. Despite the fact that Cuban government never published statistics on income distribution (Mesa-Lago, 2015), this raise in inequality is commonly accepted both by foreign and Cuban scholars (Togores-González and García-Álvarez, 2004; Espina-Prieto and Togores-González, 2012; Spadoni, 2014).

The reforms implemented in Cuba during the special period are documented in detail elsewhere (Dominguez, 2004, 2012). However, two points need to be addressed because they are essential to understand the effects of the institutional change. The first one is the partial opening of the Cuban economy to foreign investors. The second one is the introduction of the monetary duality. The opening of the Cuban borders was a slow process that started at the end of the 1980s when CMEA began to weaken. As intended by the government, foreign tourists and investors brought hard currency to the Island, allowing the state to obtain indispensable resources to support its planned economy. International tourists were almost completely absent from Cuba until 1990, but their number increased rapidly in subsequent years reaching over 2.5 million per year in the period when the data presented here were collected (Cuban National Statistics Bureau ONEI, 2012).

The current dual currency system came into existence in two steps. First, the possession of US dollars was de-penalized (1993–1994), in order to attract remittances and investors from abroad. At a later stage (2003–2004), in order to impose a greater control on financial

resources held in USD, the Cuban government replaced the dollar with the convertible Cuban peso. Thus, since 2004, two domestic currencies circulate simultaneously in Cuba: the Cuban peso (Moneda Nacional or MN) and the convertible Cuban peso (CUC, hereafter). The exchange rates are fixed but they differ for natural and juridical persons. More specifically, individual holders of foreign currency are obliged to purchase CUC, whose exchange rate is linked to the USD (currently 1: 1) and is decided by the Cuban government. The CUC/MN exchange rate is 1:25 to buy CUC and slightly lower to sell CUC. However, for Cuban enterprises and institutions, the MN and the CUC are equal in value. Thus, unlike natural persons, juridical entities (companies and institutions) operate at a fixed 1 $ = 1 CUC = 1 MN exchange rate, but they are forbidden to change MN into CUC.[1] The existence of multiple (and unrealistic) exchange rates alters the state's as well as enterprises' accounting system in at least three ways. First, the CUC/MN exchange rate (1:1) makes state-owned enterprises (SOEs) that officially operate in MN, but export part of their products appear to be less profitable than they actually are. Second, the artificial parity between MN and USD paradoxically incentivizes import at the expense of internal production (Dominguez, 2012), because imports are paid in USD but registered on the account books in MN, at the (artificial) 1:1 exchange rate, thereby making import look cheaper than internal production. Third, the impossibility for SOEs to convert MN into CUC stimulates them to focus on activities that bring CUC rather than MN (Hidalgo de los Santos and Doimeadiós-Reyes, 2003). These distortions reverberate on supply and demand causing scarcity of some goods and relative abundance of others.

The presence of a dual currency system accompanied by formal and informal norms regulating exchanges (in addition to a rationing distribution system) determines the existence of commercial circuits (Zelizer, 2005). Commercial circuits are defined as 'sets of social relationships and shared economic activities, accompanied by a common accounting system (e.g., local currencies, tokens or vouchers), shared understandings, and boundaries between members and non-members' (Preda, 2009, p. 87). As noted by Zelizer (2005), by definition, every circuit consists of dynamic, meaningful, incessantly negotiated interactions among social sites—be these sites individuals, households, organizations or other social entities. Circuits include distinctive sets of goods and services that can be exchanged and specific morals and rules that have shared meanings for the people within a circuit. In its original formulation, Zelizer (2005) introduced the idea of commercial circuits in order to highlight that every market relies on culturally meaningful interpersonal relations. We argue that commercial circuits are applicable to the Cuban case for three reasons. First, commercial circuits allow escaping the dichotomy between plan and market ideal types as institutional basis for inequality, and providing a deeper account of the emerging patterns of economic exchange. In addition, focusing on commercial circuits leads to more specific predictions, especially in the Cuban case where market reforms remained partial and the socialist redistributive system is still prevalent. Second, the relevant exchange relationships can be explicited in the framework of commercial circuits, thereby linking embeddedness and economic action. Third, commercial circuits do not reduce the explanation to the coexistence of multiple currencies, because circuits include both formal and informal norms that regulate the exchanges that take place within the circuits. For example, as we argue in the 'Theory and

1 Here we provided an accurate description of the situation until 2013. Slight changes occurred since 2014, but the mechanisms that we describe remained generally true.

hypotheses' section, the emergence of commercial circuits in Cuba is accompanied by the establishment of social norms and stigmas that further isolate the circuit in which the most desirable goods are exchanged.

Given the dual currency system (with multiple exchange rates) illustrated above, at least three institutionalized circuits of commerce are currently active on the island, each circuit is identified by the media in which exchanges take place: the *libreta* circuit (rationing distribution system), the MN circuit and the CUC circuit.

2.1 The *libreta* circuit

Since 1962, on the basis of an egalitarian redistributive principle, some goods are provided for free or at a trivial price to all the population, in the *libreta* circuit. These goods include basic commodities as well as housing-related services (repair, ordinary and extraordinary upkeep). The state distributes the same goods and services to every citizen and resident belonging to the same age group with similar health conditions—regardless of her/his employment status or working position.

2.2 The MN circuit

The MN circuit concerns various goods and services produced by SOEs, cooperatives and self-employed workers. In the MN circuit, prices often are regulated, i.e. either they are centrally determined or an informal ceiling is imposed, sometimes also for products and services provided by self-employed workers or micro-enterprises (Mesa-Lago, 2009). In some cases, the right to purchase some goods ordinarily sold in MN is subordinate to other priority rules. For example, access to Internet and home phones is not guaranteed to every potentially MN-solvable buyer, but only to those who are eligible according to their professional position. Officially, both residents and non-residents can enter the MN circuit. However, the access to healthcare and medicines, tourist accommodation, transportation and cultural and leisure-related services is restricted to residents only. The authorities monitor self-employed workers operating in MN to ensure that they comply with such restrictions. Non-residents rarely participate in the MN circuit anyway, because: (a) they simply do not know that some MN goods and services exist; (b) when they know they typically assume—often due to misperceptions—that these goods and services are of very poor quality; (c) residents generally frown upon non-residents who try to purchase MN goods; (d) non-residents' requests to exchange CUC into MN are seldom granted.

The MN circuit serves the Cuban workers, who generally receive salaries or pensions in MN, as the public sector still employs the largest number of people (83% of Cuban labor force in 2010). The distortions caused by multiple exchange rates concur in making the supply of goods and services circulating in this circuit, as well as in the *libreta* circuit, unreliable.

2.3 The CUC circuit

The CUC circuit was created on the remains of the dollar-based market formerly restricted to diplomatic staff. The commodities and services circulating in this circuit are produced and/or distributed by SOEs, joint ventures and self-employed workers. Prices in the CUC circuit are ostensibly regulated by supply and demand, but the state intervenes heavily with taxation. The CUC circuit includes not only leisure and opulent commodities (such as tourist accommodations, discos, air and bus transportation, cellular phones, Internet points and

household appliances), but also groceries and basic goods whenever they happen to be missing or in short supply in the other two circuits. The existence of multiple CUC/MN exchange rates generates incentives to import and sell products in CUC, thereby making shortages uncommon in this circuit.

Although at the beginning almost exclusively non-residents could access the CUC circuit, today formally everybody (whether resident or not) can purchase goods and services in the CUC circuit due to the progressive elimination of formal prohibitions. From a legal viewpoint, in order for a resident to make a purchase in CUC, it is sufficient to prove that the necessary sum was earned from legal activities (e.g. job or remittances). However, CUC circuit goods are very expensive (because of high taxes) and residents who routinely buy goods in this circuit risk to be controlled by the police or by the fiscal authorities. Moreover, the authorities generally discourage social interactions between actors with differential accesses to the circuits (i.e. between residents and non-residents). For example, being observed repeatedly in the company of foreigners, while lacking any apparent legitimate work-related or family-related reason to do so, may easily elicit the intervention of the police (Taylor, 2009).

3. Theory and hypotheses

As stated earlier, the government de-penalized the possession of USD and introduced the monetary duality in order to attract investments and remittances from abroad and collect the hard currency already present on the Island (Dominguez, 2004). The incoming flow in CUC was supposed to be distributed in the MN and *libreta* circuits, thereby benefiting the Cuban residents, particularly the most vulnerable part of the population. Nevertheless, both Cuban and foreign scholars argue that, despite its original purpose, the partial dollarization of the economy provided the institutional basis for exclusion and inequality (Dominguez, 2004; Togores-González and García-Álvarez, 2004; Santiso and Dayton-Johnson, 2012). In order to uncover the mechanisms by means of which the institutional reforms had such perverse effects, we focus on the exchange relationships through which individuals can accumulate wealth. In particular, we consider: (i) the favorable economic exchange relationships that are made possible by the coexistence of multiple commercial circuits and (ii) the personal exchange relationships that actors can mobilize in order to obtain scarce resources.

Since the existence of multiple CUC/MN exchange rates determines scarcity in the MN circuit, the satisfaction of essential needs has become closely dependent on the access to hard currency. Besides remittances, the possibility to obtain hard currency depends on the extent to which a Cuban can operate on the CUC circuit without incurring formal or informal sanctions. While the MN and *libreta* circuits are supposedly reserved to ordinary Cuban residents, both formal barriers and social norms make access to CUC rather difficult for them. However, some actors have privileged access to all circuits, including *legitimate* opportunities to interact routinely with those actors formally confined to the CUC circuit (i.e. mainly foreigners or Cuban expatriates, we refer to these as 'CUC actors', hereafter). The legitimacy of these opportunities is emphasized because in Cuba relationships with CUC actors, and particularly foreigners, are rather ambivalent. On the one hand, interactions with actors carrying heavy currency are understandably desirable; on the other hand, contacts with foreigners are generally discouraged or stigmatized, because they can be easily perceived as

opportunistic.[2] The possibility to interact legitimately with CUC actors is primarily a function of one's occupation, but other factors—such as personal networks, reputation and prestige—play a role too. For example, all front office occupations in the international touristic sectors have legitimate contacts with foreigners, by definition. However, also individuals with other occupations, such as sales representatives, academics or doctors, can have legitimate contacts with non-residents, depending on their international prestige and their reputation with the Cuban authorities. The impact of market-oriented reforms on inequality cannot be simply related to economic sector or occupational title or status, it requires new analytical categories. Facing a similar problem in a Chinese context, Bian and Logan (1996, pp. 744, 748) described the advantage enjoyed by some workers as a function of their 'market connectedness', i.e. their involvement in transactions outside their working units. However, in China, the degree of marketization was (and still is) higher, there was no monetary duality, and the advantages depended on the workers' involvement in transactions involving direct producers and clients. Conversely, in Cuba, the advantages depended on the workers' involvement in transactions that took place inside niches created by the existence of multiple commercial circuits.

The access to the CUC circuit provides individuals with two types of advantages. On the one hand, they can act as gatekeepers (Corra and Willer, 2002) between otherwise disconnected categories of actors, i.e. foreigners and Cuban residents. On the other hand, they can easily profit from arbitrage, e.g. buying goods in the MN circuit and selling them in the CUC circuit. These activities include both formal transactions and exchanges in the informal economy and are analogous to a form of brokerage between structurally separate groups that Burt (1992, p. 148) describes as 'institutional hole'.

Actors enjoying these opportunities for gatekeeping and arbitrage can be distinguished into two types, depending on their form of employment: state employees who work for SOEs operating in the CUC circuit and self-employed workers who hold a license to operate in CUC (*cuentapropistas*). This distinction is important for two reasons: first, while both can act as gatekeepers due to their occupation, the latter face entrepreneurial risk, the former do not. In fact, state employees often operate a 'private business' within the state organization that employs them, sometimes exploiting its infrastructure. Hence, we refer to self-employed workers as *entrepreneurs* and to state employees as *intrapreneurs*, hereafter.[3] Second, the public perception of these two categories of workers is different. Self-employed workers are perceived as extraneous to the principles upon which the socialist state is built, and stigmatized as 'new rich' (Castro Ruz, 2005; Ritter and Henken, 2014). By contrast, state employees ostensibly contribute to the collection of hard currency on account of the state. Technically, they are two very different categories. Entrepreneurs are market actors who work for profit; intrapreneurs are state employees who earn a fixed salary. Our analysis of the commercial circuits highlights two similar but distinct mechanisms. On the one hand, benefits accrue to those individuals who are formally entitled to transactions in the CUC

2 Generally, a person who repeatedly hangs around with foreigners is called *jinetero/a*, literally jokey. This expression communicates a mixture of audacity, venality and status seeking.

3 Note that in the business literature, intrapreneurs are conceived as a legitimate and desirable element of innovation while the activity of intrapreneurship described here, albeit often tolerated, is formally illegal and does not benefit the organization. We thank Victor Nee for suggesting the term intrapreneurs.

circuit, because they act as gatekeepers. On the other hand, those actors who are not formally entitled to exchanges in the CUC circuit but—due to their job—face similar constraints, manage to avoid the social stigma and enjoy similar benefits.

The predicted advantage enjoyed by entrepreneurs is consistent with some previous research findings from Cuban qualitative studies according to which entrepreneurs operating in CUCs are effectively becoming richer in spite of heavy taxation (CEPAL, 2000; Espina-Prieto, 2004). Therefore, we propose the following hypothesis.

Hypothesis 1a: because of gatekeeping opportunities, entrepreneurs who operate in CUCs are wealthier than normal workers who have no legitimate reason to interact with CUC actors

By contrast, intrapreneurs work in SOEs. Therefore, under the redistributive system, they receive a fixed salary without any additional benefit.[4] Nevertheless, their position inside organizations operating in the CUC circuit allows them to exploit the same opportunities for gatekeeping and arbitrage as the entrepreneurs. Thus, although they should formally be as rich as any other state employee, we predict that they will be richer than regular workers who lack those opportunities.

Hypothesis 1b: because of gatekeeping opportunities, intrapreneurs (i.e., state employees who interact routinely with CUC actors) are wealthier than normal workers who have no legitimate reason to interact with CUC actors

The second type of exchange relationships that we consider are those connecting actors to personal contacts through which they can obtain scarce resources. The extensive literature on social capital amply demonstrated that personal networks play an important role in the accumulation of both wealth and status (Burt, 1992; Lin, 2001). In particular, an individual's social capital depends on the resources possessed by his/her contacts that can be mobilized through the membership in social networks or larger social structures (Lin, 2001). Which personal relationships are most important with respect to inequality, however, depends strongly on the institutional context and on what type of inequality is considered. In planned economies, income inequality tends to be generally low because salaries are centrally determined, but sudden shortages of goods are endemic (Kornai, 1980). In Cuba, shortages have been aggravated by the economic crisis following the fall of the Soviet bloc. Accordingly, personal wealth is affected by the capability to procure scarce goods and services and individuals need to form relationships with others who can help acquiring such assets. These types of relationships, called *provision ties*, are peculiar to shortage economies (Völker and Flap, 2001).

As we argued in the background of the previous two hypotheses, the access to the CUC circuit is a main determinant of inequality in Cuba. Therefore, provision ties to actors who have some sources of income in CUC—either through remittances or through their occupation—are particularly valuable. Consequently, we propose the following hypothesis:

4 The state employees who deal routinely with foreign customers actually receive a productivity incentive from the state. However, this incentive is very small and is typically returned to the state in the form of solidarity donation. This solidarity donation was instituted as a consequence of the increasing perception that tourism workers benefit disproportionally from their front office position vis-a-vis foreigners.

Hypothesis 2: independent of own circuital position, the more an individual has provision ties to actors having frequent revenues in CUCs, the wealthier he/she is.

Furthermore, as various scarce (and expensive) goods can be purchased only in the CUC circuit, we expect that provision contacts having revenues in CUCs are particularly important for those individuals who do not have opportunity to access the CUC circuit themselves.

Hypothesis 3: The possibility to access indirectly the CUC circuit, through personal contacts, has a stronger positive effect on individual wealth for those who do not have direct access to the CUC circuit, than for those who do.

As provision ties serve the purpose of coping with shortages, the variety of goods that individuals can obtain through their provision network increases with the network's heterogeneity in terms of resources controlled by the contacts. Empirically, evidence from former East Germany shows that indeed provision networks tend to be highly heterogeneous (Völker and Flap, 2001). Accordingly, assuming that personal wealth increases with the efficacy of the provision network, we expect that network heterogeneity positively affects individual wealth.

Hypothesis 4: independent of own circuital position, the higher the heterogeneity of an individual's provision network, the wealthier he/she is.

As described earlier, in spite of the reforms, in Cuba, the mechanism of centralized redistribution maintains an important role. For example, key positions inside SOEs, including those operating in emerging sectors (i.e. sectors in which exchanges in CUC are highly prevalent, such as the touristic sector), are still appointed by the central government. Accordingly, we expect that redistributors continue to exert some control over economic resources as it typically occurs when market and redistributive principles coexist (Nee, 1991; Szelényi and Kostello, 1998). Therefore, we hypothesize that individuals who can mobilize redistributors as provisional contacts enjoy various advantages: not only a preferential access to resources directly controlled by their contacts, but also referrals and protection.

Hypothesis 5: independent of own circuital position, the more an individual has provision ties to redistributors, the wealthier he/she is.

Under the same line of reasoning, one would expect that redistributors themselves are capable of accumulating wealth, even more so if they exert their authority in the CUC circuit. However, this hypothesis cannot be tested because redistributors are by definition very few (about 5% of the state-workers, according to ONEI 2011) and it is practically impossible to obtain data on them. We will return to this issue when discussing the implications of our analyses.

4. Data and analyses

4.1 The sample

Data collection took place in Havana between May 2010 and January 2011. Interviewers were recruited among top sociology students and trained by the authors. As we were forced

to collect data without a sampling frame, we designed the sample as to ensure that the data included enough observations from individuals with different access to the commercial circuits, in order to obtain the required statistical power to test hypotheses 1a and 1b. Circuital positions—associated with the opportunity for legitimate contact with CUC actors or lack thereof—constitute our main independent variable. We identified three commercial circuits, related to the currency in which goods and services are exchanged. However, while the access to two of them—the MN and *libreta*—is universal and inconsequential in terms of wealth, we argue that the possibility to interact routinely with CUC actors is a major determinant of inequality. Thus, our main distinction is between individuals that have legitimate contacts with CUC actors and those who do not. As we explained earlier, having access to CUC actors depends on a number of factors, including personal characteristics, and of course, no complete list of these individuals is available. In addition, it is not always evident whether a given individual has contacts with CUC actors (e.g. for a university professor it depends on his/her international prestige). Thus, in order to avoid excessive screening costs (Sudman *et al.*, 1988), we selected respondents from segments of the population that have legitimate contacts with CUC actors *with certainty*. Accordingly, we sampled gatekeepers among those who hold front office positions in the touristic sector—either self-employed (entrepreneurs) or state employees (intrapreneurs)—and non-gatekeepers among workers lacking any legitimate reason to interact with CUC actors. Note that, although we do not have quantitative data on the normative dimension that regulates the access to exchanges with CUC actors, our sample choice is based on the assumption that access to these exchanges is regulated by social norms, in line with Zelizer's (2005) definition of commercial circuits. We supported this assumption with a detailed description of Cuba's commercial circuits, based on extensive fieldwork. Thus, our sample consists of three groups:

(1) *entrepreneurs* ($n = 95$, 26% of the whole sample);
(2) *intrapreneurs* ($n = 116$, 32% of the whole sample);
(3) *MN workers* ($n = 149$, 42% of the whole sample).

Entrepreneurs are self-employed owners of bed and breakfast who are licensed to sell their services in CUCs. Intrapreneurs are tourist guides or entertainers working as employees in SOEs, who are routinely in contact with CUC actors. MN workers constitute our reference category, consisting of ordinary workers who, due to their job, have no legitimate chance to come in contact with CUC actors (45% of them are professionals and bureaucrats, 5% are military officers and the remaining are semi-skilled or unskilled workers). Note that highly educated high-status individuals are overrepresented among MN workers. This introduces a conservative bias with respect to the test of our main hypotheses, i.e. overrepresentation of presumably privileged individuals within the group that we predict to be poorer. For each group the initial target was to reach at least 70–80 cases. Fortunately, the data collection process worked better than expected, the response rate was about 87%, and a sizable statistical sample ($N = 360$) could be reached. The data collection procedure and sample characteristics are described in the Online Appendix.

4.2 Measures

The questionnaire consisted of questions concerning personal characteristics, social relationships and wealth. Concerning social relationships, we included a name generator

(i.e. a question eliciting information on personal contacts) that was specifically designed to collect information about the contacts to whom the respondent turns in order to attain scarce goods and services. As for wealth, respondents were asked to indicate which goods they possessed from a list of items that are either expensive or simply difficult to obtain in Cuba.

4.2.1 Dependent variable

Most studies on economic inequality use data on income. However, as recently discussed by Ward (2014) despite their popularity, monetary measures are particularly problematic, especially in developing countries, as monetary incomes routinely exhibit great seasonal variations, while consumption expenditures tend to be naturally smoother. Moreover, in Cuba asking for the individual or family income was not advisable for at least two further reasons. First, salaries tend to be rather equal (Galbraith, 2012) and do not reflect standards of individual wealth (García-Álvarez and Anaya, 2015). On the contrary, wealth actually depends on other things such as additional revenues, remittances and individual ability to obtain scarce resources, for example, through personal relationships (Togores-González and García-Álvarez, 2004; Echevarria-Léon *et al.*, 2018). Second, Cubans are generally reluctant to provide detailed information on their income, especially if part of it stems from activities not directly related to the formal job and sometimes even illegal (note that salaries are estimated to account for less than half of the income, see Galtès-Galeno, 2017). Moreover, as shown by Echevarria-Léon *et al.* (2018), the universal provision of basic non-monetary assets (health, education, housing, etc.) still represents a key underpinning for the well-being of the Cuban population and the access to these essential goods has remained rather egalitarian and constant since 2006 (see Galbraith (2012) for the period 1989–2006). House ownership likewise does not discriminate between rich and poor in Cuba[5] where selling houses was illegal for decades. Only in 2011, after the data collection, a fledgling legal private market for houses was legalized. Yet, most Cubans still today live in dwellings that were originally provided by the state, or were self-built with the help of generous state subsidies (Echevarria-Léon *et al.*, 2018). Accordingly, wealthy people tend to consume rather than invest their income (see Szelényi and Kostello, 1998). Therefore, we opted for a measurement of wealth based on the possession of durable goods, which is often used to study wealth and living standards (Filmer and Pritchett, 2001; Kakwani and Silber, 2008; Ward, 2014). Similar to income, declaring the possession of scarce and expensive goods could be subject to a bias (i.e. individuals hiding expensive goods, unlikely to have been accessible given their formal salary). However, this bias is conservative with respect to our hypotheses because it is likely to apply in particular to goods purchased with income obtained through gatekeeping activities. From an initial set of 23 items included in the battery on the ownership of durable goods and transportation capital, 7 goods, fitting the requirements of the Rasch measurement model were selected to be included in the wealth index: mobile phone, computer or notebook, camera, microwave, air-conditioning, car and freezer. We constructed the index using the *raschtest* command in stata (Hardouin, 2007). In addition, an

5 In 1960, the 'Ley de Reforma Urbana' (Law of Urban Reform) confiscated the great majority of houses and forbade the sale, rental and private construction of houses. In addition, the law permitted former lessors to become owners after paying a monthly rent to the state for 20 years. Accordingly, about 85% of the Cuban population own their dwellings.

Table 1. Descriptive statistics of the variables

	Full sample		MN workers		Entrepreneurs		Intrapreneurs	
	($N = 360$)		($n = 149$)		($n = 95$)		($n = 116$)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dependent variable								
Wealth	3.01	1.96	1.87	1.69	4.28	1.80	3.44	1.58
Independent variables								
College	0.6	–	0.5	–	0.4	–	0.89	–
Age	43.79	13.89	40.42	13.62	53.59	13.67	40.10	10.14
Female	0.61	–	0.62	–	0.67	–	0.53	–
Remittances	0.2	–	0.15	–	0.26	–	0.21	–
White	0.65	–	0.62	–	0.66	–	0.67	–
Party affiliation	0.21	–	0.29	–	0.14	–	0.16	–
CUC ties	1.46	1.40	1.46	1.40	1.49	1.41	1.40	1.16
Redistributors ties	0.09	–	0.08	–	0.09	–	0.11	–
Heterogeneity	0.55	0.31	0.68	0.25	0.45	0.34	0.48	0.31

alternative index was constructed using polychoric principal component analysis (PCA) (Kolenikov and Angeles, 2009) on 18 items. The two distinct indexes of wealth correlated strongly ($r = 0.95$), but the Rasch index is theoretically superior because it is more restrictive as it ensures that the selected items only depend on the latent trait (i.e. the ability to acquire the goods) and it excludes items that do not match the model's requirements.[6] Furthermore, the Rasch index is straightforwardly interpretable as a variable counting the number of luxury goods. Therefore, the analyses presented below are conducted using the Rasch index. We included the alternative model using the scale constructed with polychoric PCA in the Online Appendix. The Rasch index is a count variable, ranging from 0 to 7. As it is typical of income distributions, our wealth index is slightly right skewed. Descriptive statistics of this index and of all independent variables are reported in Table 1.

4.2.2 Independent variables

Circuital position (hypothesis 1a and 1b) is operationalized using two dummy variables, one for *entrepreneurs* and one for *intrapreneurs*. The reference category is our control group, consisting of workers who do not have access to CUC and thus no gatekeeping opportunities. Social capital was measured using a name generator eliciting provision ties (i.e. contacts to whom respondents ask for help whenever they need 'any scarce good or service—for example, home repair, help with legal matters, automobile repair, electronic appliance, etc'.). Respondents could name up to six contacts. In addition, respondents provided information on several attributes per each contact, including gender, education, nationality (whether Cuban), profession, time of acquaintance, type and strength of the relationship and whether

6 The requirements of the Rasch Model are: (a) unidimensionality: the item responses depend on only one latent trait; (b) monotonicity: the probability to answer correctly or yes (as in the case that we are examining) is a monotone non-decreasing function; (c) local independency: the variables reaction to the test are independent.

the contact has income in CUC (always, almost always, almost never, never). The role of provision ties to actors accessing the CUC circuit (hypothesis 2) was operationalized simply counting the number of ties to actors who receive 'always' or 'almost always' income in CUC. The variable *CUC ties* is discrete and ranges between 0 and 6. Hypothesis 3—concerning the relative importance of provision ties to actors accessing the CUC circuit for those who do not have access themselves—was operationalized with an interaction effect between circuital position and the variable CUC ties. As we hypothesized that these ties are especially important for those individuals who do not routinely access the CUC circuit themselves (i.e. our reference group with respect to circuital position), we interacted the variable CUC ties with a dummy variable taking value 1 if the respondent belongs to either one of the other two groups (intrapreneurs and entrepreneurs) and 0 otherwise.

The heterogeneity of the individual provision network (hypothesis 4) was operationalized in terms of the occupation of the contacts. The occupation of the contacts was coded using a slightly adjusted version of the Cuban Standard Classification of Occupation (Clasificador Nacional Uniforme de Ocupaciones). This classification consisted of nine categories; we created a specific category for foreigners because they are valuable ties as such, irrespectively of their occupation. For the same reason, self-employed workers were likewise put in a specific category. We operationalized occupational heterogeneity of the provision network by means of an index for qualitative variation (IQV), which takes value 0 when all contacts belong to the same occupational category and 1 when each contact belongs to a different category (Agresti and Agresti, 1978). The variable *heterogeneity* was computed as follows:

$$\mathrm{IQV} = \frac{1 - \sum_{i=1}^{k} p_i^2}{1 - \frac{1}{k}}$$

where k is the number of categories (in our case, restricted to six because respondents could name up to six contacts) and p_i is the proportion of observations in category i.

Ties to redistributors (hypothesis 5) were likewise identified using the occupation of the contacts: legislators, senior officials and managers were counted as redistributors. Twenty-seven respondents (7.5%) had one tie to a redistributor, seven (1.9%) had twoties and nobody had more than two. Therefore, we operationalized hypothesis 5 with a dummy variable taking value 1 if the respondent had one or more contacts to redistributors and 0 otherwise.

Control variables: The statistical model presented below includes dummy variables for gender, race, (*college*) education, whether the respondent receives *remittances* and whether the respondent is a member of the Cuban Communist Party. Furthermore, we controlled for *age*, modeled as a quadratic function.

4.3 Statistical model

The dependent variable is measured by the number of goods owned by respondents. This variable is a discrete count, its distribution is right skewed but not zero inflated, nor overdispersed (likelihood ratio test of the overdispersion parameter alpha: $\chi^2 = 0.00$, $P = 0.5$). Accordingly, the hypotheses were tested using a Poisson regression model (deviance goodness of fit $\chi^2 = 384.9$, $P = 0.07$, indicating that a Poisson model is appropriate). In order to check for the robustness of our results, we also estimated a linear regression on the wealth

scale obtained using a polychoric PCA (included in the Online Appendix) and the results were substantively the same.

5. Results

Table 2 presents the results of three Poisson regression models on individual wealth. Model 1 only includes control variables. Model 2 includes also the five independent variables referring to hypotheses 1a, 1 b, 2, 4, and 5. In Model 3, the interaction term between circuital position and CUC ties was added (hypothesis 3). Hypotheses 1a and 1b are supported. Both entrepreneurs and intrapreneurs are richer: *ceteris paribus* entrepreneurs are predicted to own 141% goods more than the reference group and intrapreneurs 78% more. It is important to recall that as MN workers and intrapreneurs are both state employees, they are formally subject to the same egalitarian wage regime. In addition, entrepreneurs are significantly richer than intrapreneurs ($\chi^2 = 12.09$; $df = 1$; $P < 0.01$). Pairwise comparisons between the groups are affected by two conservative biases. First, our intrapreneurs consist mainly of highly educated but low-level employees as we could not access any manager of SOEs, who are presumably richer. Therefore, the difference in wealth between intrapreneurs and MN workers (hypothesis 1b) could be underestimated, while the difference between entrepreneurs and intrapreneurs (for which we presented no hypothesis) could be overestimated. Furthermore, the idea that high-ranking intrapreneurs (e.g. managers of SOEs) could be accumulating wealth is also consistent with the results of studies conducted in other post-socialist countries, who found that a privileged class of redistributors manage to benefit from the reforms (cf. Nee, 1991; Róna-Tas, 1994; Bian and Logan, 1996). Second, as already mentioned in the sample section, professionals and bureaucrats are overrepresented among MN workers (about 45%). These occupational categories enjoy the highest salaries in MN and they have more chances of enjoying some goods/services distributed as rewards by government agencies. Consequently, the difference between our reference group and the gatekeepers (hypotheses 1a and 1b) could be underestimated.

Concerning the hypotheses on the effects of personal relationships, each additional provision tie to a person with revenues in CUCs yields a 10.5% increase in the expected count,[7] *ceteris paribus*. However, this effect *only* holds for those individuals who do not have direct access to the CUC circuit themselves (i.e. our reference group for hypothesis 1a and 1b). Comparing Models 2 and 3, the main effect of CUC ties is only significant when the interaction is added. In Model 3, the main effect and interaction cancel each other out, suggesting that entrepreneurs and intrapreneurs do not obtain additional benefits in terms of wealth from CUC ties. Thus, hypothesis 2 is not supported, while hypothesis 3 finds support.

Hypothesis 4, concerning the heterogeneity of the provision networks is likewise supported: the expected count of an individual with a maximally heterogeneous network—i.e. one in which every contact has a different occupation—is 31% higher than that of an individual with minimum heterogeneity—i.e. one in which every contact has the same

7 Note that respondents mentioned relatives, friends or acquaintances of longstanding as provision ties. The duration of these relationships is generally high for all three groups, on average pre-dating the reforms (MN workers: mean = 18.45 years, SD =9.94; economic entrepreneurs: mean = 24.57 years, SD =13.83; social entrepreneurs: mean = 20.62, SD = 11.79). Therefore, reverse causality between wealth and provision networks is not plausible.

Table 2. Poisson models on wealth

	Model 1	Model 2	Model 3
College (degree)	0.16*	0.13	0.14*
	(0.066)	(0.073)	(0.074)
Quadratic age	−0.00*	−0.00*	−0.00**
	(0.000)	(0.000)	(0.000)
Age	0.02**	0.02**	0.02**
	(0.008)	(0.009)	(0.009)
Female	−0.06	−0.05	−0.05
	(0.063)	(0.064)	(0.064)
Remittances	0.34***	0.20**	0.20**
	(0.070)	(0.073)	(0.073)
White	0.13*	0.11	0.12
	(0.066)	(0.066)	(0.066)
Party affiliation	−0.15	−0.03	−0.04
	(0.080)	(0.082)	(0.082)
Entrepreneur		0.85***	0.88***
		(0.088)	(0.090)
Intrapreneur		0.56***	0.58***
		(0.086)	(0.087)
CUC ties		0.04	0.10**
		(0.024)	(0.038)
CUC ties* entrepreneurs/intrapreneurs			−0.10*
			(0.047)
Redistributors ties		0.02	0.00
		(0.105)	(0.106)
Heterogeneity		0.23*	0.27*
		(0.110)	(0.112)
Constant	0.52***	0.01	−0.14
	(0.132)	(0.164)	(0.180)
Observations			
	360	360	360
Ll	−725.58	−670.13	−668.08

Note: Standard errors in parentheses.
*** $P < 0.001$, ** $P < 0.01$, * $P < 0.05$.

profession. Finally, personal wealth is not significantly affected by having ties to redistributors. Therefore, hypothesis 5 is not supported. As anticipated when discussing the hypotheses, we could not check whether redistributors themselves are wealthier, because it was not possible to interview enough redistributors to have the statistical power. In particular, redistributors operating in the CUC circuit (such as, for example, managers of SOEs operating in the emergent sector) are predicted to be wealthy by two mechanisms: redistribution and gatekeeping. However, such rare figures were inaccessible to our interviewers. Nevertheless, 10 redistributors were included among the MN workers (i.e. individuals with no

gatekeeping opportunities): 9 managers and senior officials and 1 senior military officer. They correspond to 6.7% of our MN workers sample and, according to ONEI—but based on a broader categorization—they were 5.5% of the workers population in Havana (ONEI, 2013). These 10 respondents do not appear to be richer than the other MN workers. Excluding them from the models does not substantively affect the results. Therefore, these 10 observations were eventually included in the models presented below.[8]

Among control variables we found significant effects of age and receiving remittances. As typically found in the literature on economic inequality, the effect of age on wealth is parabolic. Wealth increases with age, with a negative quadratic effect. As remittances provide an additional source of income, by definition in foreign currency, they have a positive effect on personal wealth (Barberia, 2004; Eckstein, 2010). Interestingly, in our sample we found no effects of party membership, race (only marginally significant in Model 1) and gender, and only a weak effect of education (in Models 1 and 3). To be more specific, if we look at zero-order effects, we find that blacks are poorer than white ($P < 0.01$), but no significant difference between men and women, even when all controls are removed ($P = 0.741$). These results deserve to be considered in the light of findings from previous researches conducted in Cuba. Other scholars (Espina-Prieto and Togores-González, 2012) found that women are poorer than men and blacks are poorer than whites, using qualitative interviews. By contrast, our results suggest that race differences could be explained away or sensibly reduced when other factors are controlled for—in particular, whether respondents have regular access to the hard currency circuit, while gender differences appear insignificant in our sample. However, addressing this issue would require further research with larger national samples. Popular belief holds that the Cuban Communist Party maintains political consensus by rewarding its own members. Yet, while we cannot exclude that—as argued by Corrales (2004)—highly attractive positions are indeed strategically attributed to loyalists by the party, we found that party members are not richer than non-members. For party affiliation, the zero-order effect is actually negative. Although this effect is only almost significant ($P = 0.088$), it could be an indication that, as long as emerging business activities are considered strategic as much as they are viewed as a potential threat to the socialist values, most party members are insulated from the CUC circuit (Romanò, 2016; cf. Szelényi and Kostello, 1998).

6. Discussion and conclusions

The present study focuses on the effects of a set of market-oriented reforms implemented in Cuba starting at the beginning of the 1990s in order to cope with the economic crisis, while protecting its redistributive system. We argued that two reforms were particularly important factors in the subsequent increase in inequality: the opening to foreign investments, trade

8 We also tried replicating our model using a broader definition of redistributors (i.e. including low-level officials and managers, e.g. jefe de departamento, supervisor, jefe de brigade, etc.) and including dummy variables to separate them from the rest of the MN workers. In this model, redistributors increased from 10 to 28 and individuals with at least one tie to a redistributor increased from 27 to 88. However, the results of the model remain the same. In addition, the 28 redistributors are not significantly richer than the rest of the MN workers and having a tie to a redistributor (defined broadly) has no significant effect on the expected count.

and people, and the partial dollarization of the economy. Inequality was investigated in light of two mechanisms. These two mechanisms share a common theoretical perspective: in both cases, inequality results from the availability of resources embedded in exchange relationships. First and foremost, the reforms lead to the emergence of new socioeconomic structures that we described as commercial circuits (Zelizer, 2005). As the opportunities to access different commercial circuits are not uniform among residents, the existence of barriers between the circuits provides the basis for the emergence of asymmetric exchange relationships. In particular, privileged access to the circuit where transactions occur in hard currency is associated to various advantages, such as opportunities for gatekeeping and arbitrage. This idea finds support in our data: those actors (i.e. entrepreneurs and state employees who work in SOEs operating in emergent sectors) who, due to their occupation, are free to exchange regularly with both residents and non-residents, are substantially richer than those who are restricted to exchange predominantly with residents.

Second, inequality is generally affected by individual social capital, i.e. the ability to mobilize resources through personal contacts. In 'shortage economies', social capital includes contacts through which the individuals can obtain scarce goods (provision ties) (see Völker and Flap, 2001). In the institutional context described above, provision ties to individuals who have revenues in hard currency have a significant influence on individual wealth. However, this effect only holds for those actors who cannot rely on revenues in hard currency from direct exchanges with non-residents. In addition, individual wealth is moderately affected by the heterogeneity of personal contacts with respect to their occupation.

This study innovates on the existing literature concerning the effects of marketization in planned economies in several ways. From a theoretical point of view, marketization substantially alters the existing structure of economic exchanges, allowing for new forms of exchange to emerge. Thus, we argue that in order to explain the effects on inequality it is necessary to focus on the emerging structures, the informal rules that regulate them and the new opportunities for exchange with resourceful actors that are made possible by marketization, rather than on specific professional categories. For example, state employees working in SOEs turn out to be almost as wealthy as entrepreneurs, because they enjoy the same exchange opportunities.

From the empirical point of view, to our knowledge, this is the first Cuban quantitative study based on individual survey data and not on aggregated data released by the national statistical office. Concerning the generalizability of our results, this study is based on a sample of Havana residents selected on the basis of their opportunity to access the circuit where transactions are held in hard currency, as a function of their occupation. On the one hand, the sample choice is the result of a formal constrain, i.e. the Cuban government does not release any micro data and does not authorize large-scale surveys. On the other hand, as we argued in the sample section and in the Online Appendix, the sample was specifically designed to test our main hypotheses, concerning wealth differences between hidden populations (defined by having gatekeeping opportunities) for which no sampling frame exists. Nevertheless, our sample reflects reasonably well the general population in terms of the main demographic variables. In terms of the geographical distribution of economic inequality, the phenomena described here are representative of the most urbanized and developed areas. As opportunities to access the circuit where transactions occur in hard currency are concentrated around urban and more developed areas, we expect that higher inequality would be found in a national sample including rural areas.

Our results are superficially consistent with market transition theory (Nee, 1989) because new categories of market actors that did not exist prior to the reforms, namely entrepreneurs, are accumulating wealth, while neither having ties to redistributors nor being a party member is associated to higher wealth. However, our analyses cut across the distinction between market and state as opposite realms and postulate a different mechanism, gatekeeping. Consistent with this idea, the benefits related to the reforms are not confined to market actors. Furthermore, based on the data discussed here, the reforms did create some room for upward mobility for new actors. However, the possibility to commodify political power cannot be excluded altogether. For example, it is quite plausible that powerful gatekeepers, such as executives and managers of SOEs operating in emergent sectors, are selected among the political elite (Corrales, 2004), because these SOEs are strategically important to maintain the inflow of hard currency into the state coffers.

Studying the Chinese transition, Bian and Logan (1996) argued that the economic inequalities caused by market-oriented reforms generally do not subvert the inequalities based on political authority and both entrepreneurship and political power are rewarded. We hypothesize that something similar might be happening in Cuba as well, even though the Cuban transition is hardly comparable to the Chinese case. According to the typology of political economy in post-socialist countries, offered by King and Szeleny (2005), the Cuban reforms belong to the model of 'capitalism from below', because the Communist Party enacted them to cope with economic difficulties, often incorporating spontaneous processes, e.g. the dollarization. However, unlike in China, the Cuban government did not privatize and re-allocate property rights. Consequently, we find that in Cuba, the cleavage is not associated to ownership of the means of production, but to access to the circuit of commerce where the hard currency circulates.

The effects of the reforms were attenuated in the early 2000s (e.g. the incoming flow of hard currency was used to increase the investments in public education and healthcare), as soon as the Cuban government established favorable commercial relationships with new partners, especially Venezuela. Nonetheless, the adjustments of the early 2000s did not affect the commercial circuits. In 2011, as a result of changes in the international scenario negatively affecting the sustainability of Cuba's balance of trade, a second wave of market-oriented reforms was implemented. In Cuba, the reforming impulse—mainly driven by adverse economic contingencies—seems to be accompanied by a constant concern for the consequences of liberalization in terms of social inequality, leading to a counter-reforming impulse. The correcting policy measures typically aim at limiting the rise of market actors and generating opportunities for those categories that suffered more from marketization (e.g. medical doctors, teachers, academics, army officers, etc.). Note that these categories that represent about half of the reference group in our sample appear in fact to be poorer. The Cuban ongoing fluctuation between reforms and adjustments possibly indicates that rewards accrue both to entrepreneurs as well as supportive people. As a matter of fact, what typically passes as market reforms could be seen as simple adjustments in the redistributive policies (cf. Bian and Logan, 1996).

As far as the present study is concerned, the mechanisms that we described will remain effective as long as the commercial circuits are in place. The distortions in the economy and the worsening conditions of some categories, e.g. professionals, have prompted the government to announce (repeatedly) that the monetary duality will soon be eliminated. However, removing the double currency *per se* will not suffice to neutralize the commercial circuits.

Arbitrage is possible only when two currencies circulate simultaneously, but the opportunities for gatekeeping depend on the existence of formal and informal barriers preventing some categories of actors from exchanging freely. Given Cuba's structural economic dependency, it is rather probable that the government will maintain as much as possible its control over the inflow of hard currency. Therefore, actors with legitimate access to exchanges with foreigners are likely to maintain their privileges. Moreover, it cannot be excluded that these privileged actors actively lobbied to defer the overruling of monetary duality and the further liberalizations approved by the last Party Congress in 2011 (cf. Hellman, 1998). To this end, they can use the argument that present structures are supposed to redistribute resources across different segments of the population and protect the most vulnerable categories of Cubans workers and citizen. However, even in the unlikely event that in the near future all barriers between the circuits are eliminated, opportunities for gatekeeping will not disappear, but more likely become a function of personal relationships.

Supplementary material

Supplementary material is available at *Socio-Economic Review* online.

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