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## The institutionalisation of currency circuits in Argentina (1998-2005)

### Abstract

Most economies nowadays operate on the basis of one currency per country. Argentina was a notable and rather recent exception with several currencies circulating in rather large currency circuits at the national, provincial, municipal and community levels. This paper explores in what ways agents combined several currencies for accountancy, exchange, payments and savings. The research established what monies were used for what purposes in Argentina between 2000 and 2005. From a Polanyian perspective, it conceptualised the notion of currency circuits as institutionalised relations of a currency with specific spaces, products and categories of agents. It unpacks the concept of complementarity of money by delving into the micro level of households and businesses that deal with multiple currencies. The research discloses that households and small businesses can deal with monetary plurality by organising what currencies they use for what purpose, without converting one currency into another. What is more important, having different levels of currencies facilitates access to goods and services for segments of the population that would not have had any money or ways to satisfy their needs, which offsets the extra transaction costs involved. Monetary plurality enabled production and the use of skills that were idle, hence confirming Kuroda's hypothesis that several currencies could do more than any one currency by itself.

### Keywords

currency circuits, households, microenterprises, provincial bonds, Argentina, Polanyi

## 1. Introduction

The concept of monetary plurality addresses the existence of more than one kind of money in a territory, which implies that there are separate monetary spheres. Each monetary sphere is defined by one currency that binds uses of money with agents. The keywords in the definition are ‘uses of money’ and this article approaches monetary plurality from the point of view of the agents and the uses they make of each specific type of money.

For simplicity, monetary uses are grouped into the four main functions that money performs: definition of value for accountancy purposes, intermediation of exchanges, payments for debts and credits, and storage of wealth for later use. The definition of monetary plurality in the previous paragraph assumes that each currency can perform one or several of the four monetary functions. All combinations are possible, so agents may use one currency to cancel payments, for example, and another currency to reserve value. It is also possible that two or more currencies can perform the same function, so agents could indistinctly choose a currency to buy product A and another currency to buy also product A. Another possible combination is using one currency to buy a product from one vendor and another currency to buy the same product from another vendor, which makes sense if vendors are also the issuers of the paper money at hand. There is ample historical evidence of episodes of monetary plurality in which all of these combinations of currencies, products and agents have occurred (for example, Engdahl and Ögren (2008), Kuroda (2007), Wolters (2008), as well as Kuroda’s article in this volume).

Combinations of currencies, products and agents are diverse but tend to be notably stable, which stresses the need to understand the institutionalisation of currency circuits. Based on research of the 18th to early 20th centuries in China and India, Kuroda underlines the characteristics of that stability, and uses the term ‘currency circuit’ to address the steady ‘coupling of a particular money and a particular trade’ and which are concurrent in time and space but operate autonomously from each other and only occasionally with stable exchange rates (Kuroda 2008a, p. 21). The concept of currency circuit facilitates a discussion on the organisation of monetary plurality in stable relations of trade and money. The stability of the combinations that constitute currency circuits is consistent with the Polanyian view of the economy as an instituted process (Polanyi 1992). Institutions structure, organise and sustain economic processes so that they become stable to regulate human economic activity at a social scale. Monetary plurality is one of such processes and the agents that participate in each circuit are also stable, such as the combinations of currency and trade.

An examination of the ways in which agents use money under conditions of monetary plurality is still pending, probably out of the absence of current viable examples to conduct such a study. This article seeks to understand the ways agents combine currencies to use them for accountancy, exchange, payments and savings. In what ways do agents choose which currencies to use for what purposes? Alternatively, agents may incur extra costs to exchange the currency they have for another currency they need or prefer. Unless currency circuits are completely autonomous, any two currency circuits intersect each other at points such as money changers who will use an exchange rate to pass from one currency to the other. These are points of intersection between any two currency circuits and they are also structured by institutions like exchange rates and exchange costs. Under what conditions do agents change currencies to pass from one currency circuit to another?

The proposition in this article is that monetary plurality can exist without exchange institutions that bridge currency circuits as long as a stable division of labour between currencies emerges. In other words, categories of agents design and sustain specific combinations of currencies and trade without incurring additional exchange costs to pass from one currency circuit to another. The implication is that monetary plurality need not be significantly costlier than a single money system. The final question that guides this article is, in what ways do currency circuits become institutionalised as stable relations binding agents, currencies and trade.

This study is based on the case of Argentina between 1998 and 2005, when economic agents dealt with several currencies to make their payments. The research sought to establish which currencies

were used by agents for what purposes and on what grounds these choices were made. Data was collected on the monetary practices of households and small businesses that participated in the community currency circuit, the *Redes de Trueque*, because these households would also use national and provincial currencies. The opposite does not stand: some households used only national currency, namely households where the breadwinners had formal and well paid jobs. The use of private currencies such as business vouchers was restricted to a minority of households with formal jobs, so they were excluded from the analysis. The data used in this research belongs to a larger and ongoing research project on the *Redes de Trueque* that includes participant observation and a survey of 386 households with a semi-structured questionnaire which was administered face to face in marketplaces where the participants had goods on sale. The initiators of the *Redes de Trueque* were interviewed repeatedly in order to reconstruct the evolution of the scheme based on oral history. Extensive interviews were conducted also with various experts and academic researchers. A desk study of other research and journalistic reports on the topic is ongoing.

## 2. Dealing with monetary plurality

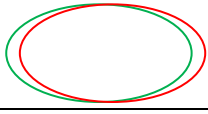
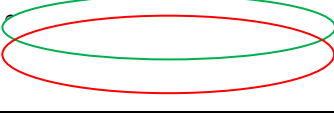
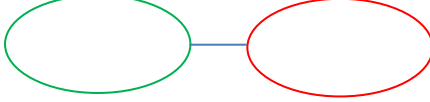
Periods of monetary plurality have been ubiquitous throughout history in both the Eastern and Western hemispheres. This is hardly news (see article by Gómez and von Prittwitz and Kuroda in this volume). However, patterns or the ways in which agents have combined currencies for different purposes is not a well-researched aspect of monetary plurality. The assumption behind this is, perhaps, that agents would change the currencies they had at hand for a 'better' currency, and not as the result of institutionalised practices. The belief that there is a clear hierarchy among currencies veils the significance of binding them to agents and uses in stable relations. This has also limited the analysis of currency circuits.

One of the few attempts to look into the organisation of monetary plurality is an article by Jerome Blanc (2016), '*Unpacking monetary complementarity and competition: a conceptual framework*'. The study offers mainly a theoretical conceptualisation of how several currencies relate to each other. Currencies stand in relations of competition or complementarity with other currencies, depending on whether they can be used to price goods interchangeably, they can be converted into one another by means of exchange rate, they can be used together and they can be used in the same or similar monetary spheres. The different combinations of these four dimensions allow for more possibilities than simply stating that monies compete or complement each other. Blanc's work does not centre on the choices or uses decided by agents in contexts of monetary plurality but how currencies stand in relation to one another, leaving agents and dynamics out of the analysis. With a static approach, Blanc argues that currencies can be substitutes (only one currency can be used at a time in a given territory), simultaneous (several currencies can be used at a time in a given territory but conversion may add costs), supplements (one currency does what another currency does not, so several currencies are needed at a time in a given territory to cover all the possible uses of money) or autonomous (they are independent in time and territories). A graphic interpretation of these relations is shown in Figure 1. In this way, Blanc (2016) contributes an analysis of monetary plurality that admits several relations between currencies, and while some currencies compete with each other, other currencies complement one another. The question is whether one currency will end up dominating a territory and push all others to disappear. Blanc hints that the answer is no, as long as there is no Polanyian all-purpose money that can perform all the functions, always and everywhere. In other words, as long as currencies complement each other, monetary plurality would expand the universe of production and exchange from a substantive economy approach.

Kuroda (2008b, 2008a) asserted that no money does all the functions that economic agents need it to perform. His views emphasise supplementarity and add that, in most cases, monetary plurality was not incidental but conducive to the functioning of the economy. Kuroda argues specifically that, 'one money could do what another money could not, and vice versa. In other words, an assortment of monies could do what any single money could not, and supply what the market required' (Kuroda 2008b, p. 7). The implication of this reasoning is that in contexts of monetary plurality, a division of labour among currencies must exist. Agents hence use one currency for one

purpose and another currency for another purpose. The institutionalisation of currency circuits reflects on particular properties of each currency to function in the medium term, so that some agents give it and other agents accept it in exchange for goods or other currencies.

Figure 1 Articulation between complementary monetary circuits

Monetary circuit 1 	<b>Monetary Circuit 2</b> Simultaneous moneys (eg, bank notes and coins)
Monetary circuit 1 Monetary Circuit 	<b>Supplementary moneys</b> (eg, layering in big and small expenses)
<b>Monetary circuit 1</b> <b>Monetary Circuit 2</b> 	<b>Autonomous moneys</b> with possibility of conversion between them.

Own interpretation of Blanc (2016)

Kuroda's notion of currency circuits emphasises the stability that binds agents, uses and products. Stability is the key characteristic of institutionalised economic processes. Hodgson's (2006, p. 2) established definition of institutions conceptualises them as 'systems of established and prevalent social rules that structure social interaction'. These dispositions refer to socially accepted courses of action for various situations. According to Hodgson's account (Hodgson 2003, Hodgson and Knudsen 2004), institutions are formed in processes of reconstitutive upward causation, by which agents' repeated actions structure new institutions that become stable and achieve ontological existence at a social level. Under conditions of monetary plurality, institutions indicate that for each purpose of trade, savings and payments, there is a particular currency that is acceptable in the local context. The notion that economic interactions among agents are structured extends to the repeated and preferred use of a specific currency per vendor or product.

The second aspect of the organisation of monetary plurality in distinctive and stable currency circuits regards their articulation. If currencies partially share spaces, as Blanc suggested, then there must be points of intersection linking the various currency circuits such as legal regulations, exchange rates, exchange banks, money changers, and other institutions that structure the interaction of agents across currency circuits (Kuroda 2007, Boyer-Xambeu, Deleplace and Gillard 1994). In the next section we will explore how monetary plurality was organised in distinct but concurrent circuits in the Argentine case and the ways in which division of labour emerged.

### 3 Inflation and bimonetarism in Argentina

In contrast to most countries, in Argentina the concept of money is seen as a social construction that governments mould to their policy objectives. A broad menu of failed anti-inflationary policies had been tried since 1930s, including four changes in the national currency that scrapped digits and sought to add credibility to policy efforts to curb average two-digit inflation rates. There were other equally desperate efforts to control monetary supply. For instance, in the winter of 1962, the government paid civil servants their wages in bonds instead of official money. The fiscal accounts were then seriously distressed and the government wanted to avoid the inflationary effects of issuing money to cover its deficit (Cortes Conde 2005). These bonds were accepted by most shops and firms, and public servants spent them as soon as they could. Later, in the 1980s, provincial money was issued in two provinces that could not pay wages to their public employees and printed small amounts of provincial bonds to cover the expense. They were accepted reluctantly in their

territories and the holders spent them as quickly as possible (Schvarzer and Finkelstein 2003). Shopkeepers referred to provincial money as 'hot bread', a reference to the desire to get rid of them quickly. Banks and the entire financial system were also affected. For instance, in 1989 bank deposits were confiscated and exchanged for government bonds. The tradition of inflation, coupled with monetary and financial manipulation, generated the curious understanding that what is socially accepted as money has been as much a matter of social judgement as of political decision.

Argentines rarely regard their national money as an untouchable institution that the state commits to ensure. A long term search for a harder currency gradually led agents to adopt the US dollar as a second currency. Initially, it was only a reserve of value but the dollar gradually institutionalised as unit of account for pricing most goods and services, and to use as means of payment. In the second stage, the dollar was used to express the prices of larger goods such as houses and cars, and to stabilise the value of contracts. In the third stage, the dollar was also preferred as means of payment to buy those larger goods and services. The inflationary problem kept aggravating and reached a peak with three hyperinflations between May 1989 and the end of 1990, a period of less than two years. It then became common practice to pay all goods and services in pesos calculated at the hourly advertised exchange rate of the price in dollars. It was the fourth stage in which the dollar became means of payment accepted by most private actors.

After three hyperinflations, the top policy priority in 1990 was to 'reconstruct' the institutions regulating the relationship between the population and money, the monetary system, and monetary-defined property rights (Cavallo 1999). Domingo Cavallo, the Economy Minister, contested the monetarist view that the source of inflation was the quantity of money in an economy and was instead inspired by Friedrich Hayek (1976) in the view that it was the quality of money that determined agents' monetary preferences. Cavallo (1999) describes the monetarist theory of inflation as incomplete because it does not pay attention to the institutional aspects of money. Full dollarisation at the macro level was discussed within policy circles but the idea did not gain ground because it was seen as politically inviable (Fanelli and Heymann 2002). Instead, the government opted for a consolidation of the two currency monetary system captured in the Convertibility Plan.

In March 1991, the Congress approved a law transforming the Central Bank into a currency board, pegging the Argentine currency to the US dollar at a rate of 1 to 1 and allowing all transactions to be performed in any currency of choice (Fernandez and Schumacher 1998). The law forbade indexation in contracts but protected the option of denominating prices in dollars. This also applied to bank deposits over any term. It gave the Central Bank autonomy and specified the level of foreign currency reserves it would have to maintain, while it determined that the Central Bank would no longer act as lender of last resort to the banking system (no other institution was designated for that function). In practice, this ensured that money would be issued endogenously in alignment with inflows of foreign currency. In January 1992, the national currency would be the peso, at par with the dollar. It was a shortcut for the recovery of the institution of money, and the combined M3 increased to 20 percent of GDP by 1994 (Fanelli and Heymann 2002). Convertibility allowed agents to choose, at any point in their economic activity, which currency they wanted to use for what purposes. Instead of fighting it, the Convertibility Plan built upon the practice of monetary plurality and achieved what no other stabilisation plan could in the past in Argentina: inflation disappeared for a decade and the credibility of the peso was restored.

The Convertibility Plan formalised a monetary system composed of two currency circuits with significant overlap, which was termed bimonetarism. The origin is to be found in the long term experience with inflation and the failure of indexation to adjust quantities properly: price indexes tell a story of past price increases while the exchange rate reflects the increases currently going on (Heymann 2000). The substitution of a bad currency (peso) for a good currency (dollar) was termed 'reverse Gresham's Law' in Argentina (Guidotti and Rodríguez 1992). When inflation started rising, agents would flee to good currencies such as the dollar to protect the value of their payments, goods for sale and savings. Uncertainty over the future purchasing values in pesos prevented agents from seeing the peso as the 'natural' unit of account and would only have good currencies in

circulation. The 'natural' unit of account then became the currency that could effectively guarantee purchasing power in the future (the dollar).

Back to the articulation of currency circuits, this section has shown that inflation created the conditions for a second currency circuit to emerge, which was complementary to the official Argentine currency and centred on the use of the US dollar for specific types of payments and savings. The formalisation of this dual monetary system came with the Convertibility Plan, which extended the scope of the second currency circuit to bank deposits and tax payments. The relationship between the two currencies evolved into one of simultaneous complementarity, in Blanc's typology, because any payment, could be made with the combination of pesos and dollars, in the same manner as coins and bank notes can be combined. However, the two currencies could not be used for all the same purposes and there were conversion costs between the currencies.

#### **4. Structural adjustment and non-state monetary circuits**

The formalisation of a bimonetary system was only one of the components of the Convertibility Plan. Monetary reform was implemented together with one of the most ambitious and swift privatisation programmes in Latin America, involving almost all state-owned enterprises, public utilities, the pension system, much of the healthcare and the banking sector (Kosacoff 1993). Markets were opened to trade, the regulations on foreign investment were relaxed, and several other sectors were deregulated. The structural reforms triggered a significant growth rate of eight percent a year from 1990 to 1994. GDP increased by 27 percent between 1991 and 1994 but with a marked heterogeneity between sectors: while the industrial GDP hardly grew, services bloomed and with it, part of the middle class (Kosacoff and Heymann 2000). At the same time, regional economies based on agriculture and small enterprises were particularly hit.

In 1995, a major economic crisis hit the 'modernised' Argentina of the Neoliberal experiment. It caused major disruptions in the balance of payments and the peg of the peso to the dollar almost collapsed, but was saved at the cost of a recession that skimmed five percent off the national product in 1995. The financial crisis also introduced many Argentines to the traumatic novelty of not having a job. The unemployment rate had stayed around five percent in the 1980s but it was rising due to the changes in the industrial sector, the retreat of the state, and privatisations. In 1995, Argentina had a record unemployment rate of 18.8 percent and the term 'hyper-unemployment' was coined. Real wages in 1995 fell to 68 percent of its 1986 level and 62 percent of its 1975 level. The social costs of the structural reforms were beginning to be reported by the media, which revealed pools of poverty that had never been seen before. The crisis induced a moment of awareness. It was then that the public realised that the institutions regulating economic activity and the relationships between the private sector, the state and civil society had changed permanently.

On the upside, part of the Argentine society bloomed with the opening of markets, and the arrival of a myriad of transnational corporations in the service sector was then introduced to a private type of money. These were vouchers issued by private businesses and sold to employers, who gave them to their workers as part of or in addition to their wages. These vouchers allowed employees to buy meals in restaurants and, later on, food in supermarkets and oil in most gas stations. They were not considered part of the salary according to the labour laws, so they became a cheaper option for employers to reward their workers than regular money. Private vouchers hence overlapped with pesos for purchasing those basic necessities, but rarely overlapped with dollars. There was no segment of the market for which it was the main money.

On the downside, poverty grew dramatically. Argentina had been used to pockets of poverty for decades, but what was striking in the 1990s was that the poverty extended to a larger segment of the population and was much more visible. An early study of the social consequences of the structural reforms coined the term 'new poor' to describe households that had recently fallen under the poverty line in a country where about 70 percent of the population had declared itself as middle class (Minujin 1993). They were shopkeepers, public servants, skilled workers, graduates, blue collar

workers, bank clerks, teachers and small firm owners. Many of the sectors in which the middle class worked were targets of the reform policies and were thus overwhelmed by their disenfranchisement. Scholars define the new poor as those whose situation depends on their previous status, educational attainment, availability of savings, and assets, such as their house, personal capabilities and social network (Lvovich 2000, Murmis and Feldman 1993, Minujin 1993, Minujin and Kessler 1995). Their structural basic needs were covered, but with the drastic reduction in their income, they could no longer afford their lifestyle. Their network of contacts was crucial in delaying the decline but they no longer felt a sense of belonging with them. They understood the world differently from the structural poor and were demanding of society and the state. They were the poor with a voice.

Collective actors set to reorganise social life independently from the state, ensuring representation through new channels and promoting alternative income generation schemes. Among them were the *Redes de Trueque*, the brainchild of two grassroots groups that organised a local exchange network where participants would buy and sell goods and services from each other by using a money they had created themselves. They were launched at a local level with 25 members on 1 May, 1995, but their replication in other locations was extremely fast. The initial success and the potential of the scheme to alleviate the economic problems of the disenfranchised middle class neighbours made them 'want to spread it everywhere' (Interview with national leader in Bernal, Buenos Aires, on 4 August 2004). In the beginning, each local exchange centre had its own surrogate currency, which was not convertible to pesos outside it, but after a while the currencies were accepted in other centres. Eventually, a number of systems of complementary currencies emerged at the local, regional and national levels with abstract means of payment, depersonalised, dematerialised, and transferable money created by civil society organisations. The *créditos* was the only currency that circulated in the *Redes de Trueque*, although some accepted a combination of pesos to cover raw materials and inputs.

It was clear from the start that the *Trueque* had a strong gender bias and at least 70 percent of the participants were women. As observed by other researchers (González Bombal, Leoni and Luzzi 2002, Parysow and Bogani 2002), middle class women were the most affected by the slide into poverty, as it deprived them of access to the public spaces they were used to visiting, and they quickly accepted the proposal of the *Trueque*. Used to unpaid work, women were the first to understand that the *Trueque* offered satisfaction of needs without the mediation of regular money. The *Trueque* links directly to the reproduction of life: it 'fills the fridge, paints the home, gets you a plumber to fix the pipes', one participant said (Interview with RT participant, Billingham, Buenos Aires, 9 November 2004).

At first sight, it seems to be a major innovation for a civil society group to print its own money, but in Argentina, it was not. The creation of the *crédito*, the name the community currency was usually referred as, represents a small innovation on the institutionalised practice in Argentina of using several currencies at the same time. For decades, the country had a bimonetary system in which both pesos and dollars circulated together. The *créditos* were added as a new currency created by a grassroots organisation to circulate within its social network. They were just an extra option in a list of means of payment at hand. The creation of a currency parallel to the official one would have been illegal or bluntly rejected in other countries, but in the Argentine case, it was within the acceptable responses. People were used to living with two or three currencies, so why not four or five? As Swanke (2004) expresses it, once the institution is in place, the actors simply forget how it was created and adopt it for their use.

In terms of monetary circuits, the *Trueque* added a currency and with it, a new stable relation was born between specific community currencies, their participants (agents willing to trade their goods and services for *créditos*), and their products. Most products on sale proceeded from the resale of stocks such as second hand goods or bought within the formal currency circuit in pesos, or home production with small scale technologies). The community currencies were a supplementary currency circuit because they were used for additional products or trade that would not have had any value in pesos or would not have occurred if everyone had a strong preference for pesos.

## 5. Subnational state currency circuits in Argentina

The moment of truth for Argentina's neoliberal development model came at the end of the 1990s. Community currencies were well established and growing by the time the country suffered a new and more severe crisis. In 1999, the GDP dropped by 3.4 percent and the recession was met with more deregulation and structural reforms. A new government, formed by the opposition party, took office in December 1999 with its entire campaign based on reassuring the public that it would maintain the peso's peg to the dollar and continue implementing the Convertibility Plan.

Unfortunately, it was able to do little to spur economic growth and one of its first measures was to raise taxes to correct the fiscal deficit. Tax increases delivered the Argentine economy directly into a recessionary trap with higher budget deficits and further cuts in government spending (Harman 2002). It was the beginning of the longest and deepest productive retraction in Argentine history. The economic demise of four years skimmed 20 percent of the GDP between 1998 and 2002 (Gerchunoff and Llach 2005).

The fiscal cuts applied to the provinces, some of which historically had high public employment, and protests started there (Pastor Jr and Wise 1999). The combination of provincial deficits and the refusal of the central government brought several subnational governments to the brink of default on their debt and in arrears with suppliers. The province of Buenos Aires was the first one to issue an Emergency Provincial Bond to avoid a general default on its payments, and soon used them to partially cover the payments of wages. The experience was successful to increase the liquidity and reactivate the depressed local economy of the province, which encouraged other provinces to replicate the issuing of their own subnational currencies.

Argentine provinces had already issued subnational bills in the 80s and some provinces had never stopped using them, such as Tucuman (see articles by Théret in this volume). The 2001 generation of subnational currencies was slightly different because they were meant to circulate as almost compulsory debt. The bills created a provincial unit of account in which their value was denominated. At the same time they served as reserve of value because they paid an interest when they matured, and as means of payments to cancel debts with suppliers and utility companies in their territories, while they also circulated as medium of exchange because public servants used them to buy from shops and supermarkets, for example, which in turn used them to pay local taxes and their workers' wages, among other costs.

The provincial bills were generically called 'quasi-currencies' and were institutionalised already by the end of 2001 (Schvarzer and Finkelstein 2003). According to Alvarez et al. (2011), the issuance of subnational currencies reached a peak in September 2002, when they represented 51.32 percent of the monetary base. Alvarez et al (2011) consider subnational currencies as an 'unheard of' measure because the provincial bonds formed locally restricted monetary circuits of a scale that exceeded the value of the transfers from national tax revenues. The reason behind these proportions was related to the severity of the crisis: there was not enough national currency to perform the basic functions of money as media of exchange and means of payment. Some accounts, hence, consider that the provincial currencies had clear reactivating effects in the local economies (Schvarzer and Finkelstein 2003, Théret and Zanabria 2009), because they activated production and trade that would otherwise have remained idle with the available national money.

At the same time, provincial currencies were restricted to the provincial territories, so agents that needed to make payments outside the province would have to convert them to pesos or dollars. Many economic agents would hence try to spend their quasi-currencies to cancel taxes first, wages second, other costs third, and what was left was converted to pesos or dollars. A supermarket manager noted that 'all in all, we noticed that a very large proportion of our costs are local. Moreover, when we realised the provincial currency was not circulating fast enough, we would stop accepting it. But there was not much choice because customers did not always have anything else to pay with' (Interview with Supermarket Manager in San Martín, Buenos Aires, 4 December 2004).



As their circulation became more common, provincial currencies established a new stable relation between themselves, agents and products. The products were those that were produced and consumed locally, which explains why local currencies are seen by some authors as having supported economic recovery in the middle of the economic demise. The agents were initially public servants and public sector suppliers, but later it was any business that had them as clients and managed to make payments with provincial currencies. They were a supplementary currency circuit, in Blanc's typology, because they sustained the local economy throughout the crisis, keeping workers in waged employment and businesses afloat that, perhaps, otherwise would not have been possible.

## 6. Matching money and transactions

By the turn of the millennium, many Argentine households were using up to five currencies - pesos, US dollars, provincial quasi-currencies, private vouchers and *créditos*. The phenomenon fit Kuroda's (2008a) analysis, that different currencies fulfil the four main functions of money to different degrees, in different spaces and for different groups of agents. Each type of money did something that the others did not, so it took several currencies together to satisfy the various needs to pay for all the transactions that a household or small business needed.

In line with Blanc's (2016) definition of complementarity, dollars and pesos circulated together and could be combined at the same time, so they were complementary instead of competitive. For savings and larger payments like capital goods and housing, the dollar was the preferred currency. The peso was the only currency used to pay taxes and debts with the state. Basic necessities could be bought with private vouchers or pesos in supermarkets and regular shops, with provincial currencies if the recipients could recirculate them to other agents or pay their taxes, with community currency if they were obtained in the *Redes de Trueque* or with a combination of *créditos* and pesos when the exchanges were made with small shops that accepted *créditos*. So, under conditions of monetary plurality, different currencies circulated in different spaces where different agents participated.

If currencies are arranged in a hierarchy based on the level of stability perceived by the public, dollars would be at the top because they were also used as reserve of value, which was a function that many community currency *créditos* would perform poorly. While dollars are issued by the government of the largest economy in the world, the *créditos* were issued by local civil society organisations without any real or legal guarantee. In the middle, the pesos were issued by the Argentine government and protected by the constitution, regardless of how contested the state was at that time. The provincial notes were printed by subnational governments and could also claim legality by the provincial constitutions, and were backed up by the transfers of the central to the provincial governments. The private vouchers were distributed by large transnational corporations and have a validity of less than one year, a period during which the issuers were considered reliable. However, the hierarchy of money in terms of its reliability was not an issue for the vast majority of Argentines that did not have the choice to compare currencies and decide which one they wanted to use. Any currency was better than no currency at all, so the place of each currency in a hierarchy of money was secondary to their availability for different agents. For the poor and unemployed who could only generate income in complementary currencies, the reliability of the dollar as the hardest currency was of no significance.

The fieldwork surveyed households and small businesses that participated in the *Redes de Trueque* in order to obtain a full range of uses of the different monies available. A summary of what exchange each household would use to pay for what goods and services is shown in Table 1 below. The ideal currency to use as reserve of value was the dollar, which was also the hardest to obtain, but that function was not perceived as crucial because most of the households interviewed did not save any income at all. That means that a vast number of households did not save and barely had access to dollars, so they did not belong to the dollar currency circuit.

In contrast, community currencies were the money that poor households could access the easiest. Although *créditos* sustained the smallest currency circuit in terms of geographic and temporal scope, because they were limited to one or a small number of exchange centres, they were also the easiest to obtain. In addition, users' preference for them is related to their consumption needs. A very large percentage of the daily necessities of low income households could be met in *créditos*. So they participated strongly in the circuits of the community currencies. These circuits were hence inclusive of segments of the population that, in their absence, would have remained excluded from the economic activities of production and trade.

Table 1. Households: WHICH MONEY FOR WHAT?

	Monetary circuits	Dollars	Pesos	Treasury/ provincial	Private vouchers	Créditos
1	Savings	√	√			
2	Taxes		√	√ Local tax		
3	Public services (electricity, water, transportation)		√	√ Locally		
4	Large purchases (houses, cars, electronics, machines)	√	√			
5	Petrol	√	√	√ Locally	√	
6	Other non-food purchases (clothes, shoes, toys, school articles)	√	√	√ Locally	√	√ (in RT)
7	Personal services (health care, home maintenance, personal care)	√	√ some	√ Locally		√ (in RT)
8	Every day food necessities	√ some	√ some	√ Locally	√	√ (in RT)
9	Inter-household informal trade					√ (in RT)

Households assessed the various currencies based on the entire flow of money and contrasted the use of the various currencies with their own accessibility to them and compared the suitability of currencies to their needs and expenses. The articulation of each currency to the other types of money would have been significant if households could choose in which currency circuits they wanted to participate, but that was not the case. The dimension of accessibility to various currencies in conditions of monetary plurality is a key factor for assessing the quality of money.

The Argentine experience provides evidence to Kuroda's analysis that none of the monies available in Argentina was capable of satisfying all the needs of the households. Each one of them was acceptable towards pay for goods and services that other currencies could not, although there were clear overlaps. Even the money with the widest acceptance, the dollar, was not valid for paying taxes and other transfers to the public sector, and payments in dollars for small expenses faced problems of conversion of the change that had to be given back. There was no small change in dollars, so fractionary money was always in currencies other than the dollar.

A similar analysis for small shops and businesses is shown in Table 2. Like with households, saving was not a concern that many of these shops could attend to in the middle of a severe crisis.

Table 2. Small businesses and shops: WHICH MONEY FOR WHAT?

	Monetary circuits	Dollars	Pesos	Treasury/ provincial	Private vouchers	Créditos
1	Savings	√	√			
2	Taxes and rent	some	√	√ Locally		
3	Public services (electricity, water, transportation)		√	√ Locally		
4	Large purchases (houses, cars, electronics, machines)	√	√			
5	Petrol	√	√		√	
6	Wages		√	√ Locally	√	
7	Suppliers		√	√ Locally		√ (in RT)
8	Daily business services (cleaning, small maintenance)			√ Locally		√ (in RT)
9	Sale of leftover, second class or expired stocks					√

Monetary plurality in Argentina was not a matter of choice but a response to a deep crisis that undermined economic activity and the legitimacy of the state and monetary institutions at the same time. Different actors then created means of payment for different groups of agents and for different purposes. The outcome was a fragmented market with various types of currency circuits and groups of agents. At the same time, it was a larger market than what the use of only one type of currency could have sustained, had monetary plurality not existed. Especially for the groups of the population who had problems of access to money, the existence of complementary currencies supported their survival. A large number of households and small businesses were able to go by during the worst crisis in Argentine history precisely because they had access to various currencies, which allowed them to participate in several monetary circuits at the same time. Monetary plurality therefore implied that households and small businesses had to find the best match between currency and purpose.

## 7. Conclusion

This article seeks to understand in what ways agents combine currencies to use them for accountancy, exchange, payments and savings. Moreover, it traces the origin and reasons behind the institutionalisation of currency circuits as stable relations that bind agents, currencies and trade. Following Blanc's argumentation beyond the competition approach to money (2016), the Argentine case suggests that competition is only evident when money is assessed in terms of all its four functions together (definition of value for accountancy purposes, intermediation of exchanges, payments of debts and credits, and storage of wealth for later use). When these four functions are looked at one by one, it becomes evident that agents chose different currencies for different uses. A

further breakdown of these four functions shows that a division of labour arises as stable combinations of purposes and social strata of the agents, as shown in Tables 1 and 2.

Agents become included in the currency circuits that are more accessible to them. So while agents of higher socioeconomic conditions may have a choice in which currency they use for what purpose, agents of lower economic strata do not have such a choice. Currency circuits do not only represent pairs of trade and currencies, as theorised by Kuroda (2007, 2008a, 2008b) but trios of trade, currencies, and the social strata of the agents that receive and spend a specific currency. Agents of higher socioeconomic strata actually have a choice on which currency they want to use within a hierarchy. There is a logical preference for the type of money that does all or most of the four basic functions of money, including the denomination of savings or large investments (reserve of value). For social strata that do not save, money becomes primarily means of payment and medium of exchange for daily necessities, and these households use the currency they can obtain through the easiest way - or perhaps the only way - in currency circuits that rank lower in the monetary hierarchy. In other words, money is layered along social lines which dominate the inclusion in currency circuits.

Lower currency circuits relate the closest to everyday consumption needs. For households that use most or all of its income in daily necessities, complementary currencies are adequate to sustain their survival. These currencies procure most of the goods and services in their household consumption baskets. For households that consume other goods, the inclusion of a currency of lower level represents a loss of welfare. Instead, households that consume mostly basic necessities (items 6 to 9 in Table 1) use lower level currencies.

The account of monetary plurality presented in this article supports Kuroda's reasoning (*ibid*) that the coexistence of currency circuits enables more trade and more production than would have otherwise been possible with only one currency. Moreover, the analysis of the evidence suggests that monetary plurality can have a positive effect in terms of social inclusion, because lower level users can have access to income generation and make payments in a lower level currency. Clearly, their choice is restricted to goods produced and traded in these lower level circuits, but the alternative is not having any money at all and, consequently, no chances of accessing those goods or any others. While the regular economic system excludes the lower socioeconomic strata of the society, lower level currency circuits appear as 'better-than-nothing' option to sustain life during a deep economic demise. If complementary currencies had been forbidden, it would have been damaging for the poor. We reached a similar conclusion in the article by Gómez and Von Prittwitz in this volume.

The emergence of a division of labour among currencies adds another dimension to the statement that currency circuits supplement each other within a relationship of complementarity, as argued by Blanc (2016). Simultaneous complementarity is about choosing to use a harder currency as reserve of value, while supplementarity relates to need. It appears as a defence mechanism against exclusion that enables different conditions of inclusion. It suggests that passing from one currency circuit to another is not only costly, but also generally unnecessary. Households participate in several currency circuits at the same time and combine each currency with a particular purpose, meaning that they make payments in the same currency in which they obtain their income. In other words, circuits intersect within the households and shops that use them, and do not exchange one for the other. The users can and will avoid incurring extra costs to move between currencies. They do not convert currencies to buy a specific good but match the currency in their hands with the goods on offer in that currency.

The conclusions presented here are using a circular argument: different level currencies emerge because they include users that can access them and use them to procure most of the goods and services in their household baskets. The more these agents use supplementary currencies, the more these currencies sustain their lives, so agents use them more. Circular argumentations like that one resonate with most accounts of institutionalisation and structuration processes. The concept of reconstitutive upward causation (Hodgson, 2004, 2005) argues that repetitive usage and

convenience can reconcile agents with options that were new for them at an earlier point, so that they reproduce actions and support their dissemination to other agents. Currency circuits follow a pattern of emergence, usage, and dissemination around an episode of economic crisis. They present the institutionalisation of links between the users of a currency, the purpose, and access to it. Institutionalisation suggests that the rules of inclusion and engagement in each currency circuit are clear, as well as their limits and potentials. This may be relevant for the subsequent stability of the currency circuits and their reemergence in other periods of crisis.

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