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**Article (Accepted version)
(Refereed)**

Original citation: Gómez, Georgina M. and Dini, Paolo (2016) *Making sense of a crank case: monetary diversity in Argentina (1999–2003)*. [Cambridge Journal of Economics](#) . ISSN 0309-166X

DOI: [10.1093/cje/bew034](https://doi.org/10.1093/cje/bew034)

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Available in LSE Research Online: July 2017

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Making sense of a crank case: monetary diversity in Argentina (1999-2003)¹

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Abstract

Based on empirical data, this study discusses the introduction, acceptance and circulation of two complementary currencies in Argentina that do not fit well in the main approaches to the nature of money. These two monetary circuits, provincial and community currencies, were introduced as units of account to denominate the value of debt and circulated as means of payment to overcome monetary stringency during the crisis of 1999-2003. After discussing several theories on the nature of money, we reflect on the institutional significance of currency circuits as concurrent and rather stable pairs of trade and money. We suggest that several theories of money need to be combined to account for the variety and heterogeneity of daily monetary practices in a broad spectrum of countries.

1. Introduction

Different flavours of monetary theory fare better at explaining money depending on the socio-economic context and, especially, the scale of the economy it mediates. The Argentine case provides a great deal of empirical evidence against which different theoretical explanations of money can be tested. In 2002 Argentina had several monetary forms circulating at the same time at the national, sub-national and local community levels. Such richness is a consequence of the fact that monetary experimentation in Argentina took place over a period of several decades and at all scales from the global down to the neighbourhood level, in all cases involving millions of people. As the scale of economic systems decreases, the relative importance of the social dimension increases, such that the mix and relative importance of the disciplinary perspectives needed to understand the nature of money also changes. To understand the Argentine monetary experience of the last few decades and of the 1999-2003 period in particular a combination of theoretical perspectives is required, no single theory of money will do. This paper wishes to make a contribution in this regard by looking into the plurality of monetary forms in Argentina, which is barely covered in discussions on the nature of money.

As explained by Ingham (2004) discussions on the nature of money are broadly divided between the Aristotelean commodity theory of money and the claim or credit theory. The commodity theory is still the main reference point in economics. It proposes that a commodity of intrinsic value emerged as preferred medium of exchange in barter-based markets and has been dominant in policy circles at least since Menger published *On the Origin of Money* (1892). The credit theory explains how markets and economic exchanges worked before money was invented; traders in small-scale societies used credit and kept track of who owed what to whom, rather than engaging in direct barter as Adam Smith claims (Graeber, 2011). In today's post-gold standard economies credit money is again created endogenously as loans by banks in response to a demand for means of payment to finance production (Gambetta, 1988; Rochon and Rossi, 2003; Realfonzo, 2006, Schumpeter, 2006 [1954]). Similar to the credit theory but with a more sociological emphasis, the institutional theory (Bell, 2001; Wray, 1998; Ingham,

¹ This research project was partially funded by WOTRO/NWO, Grant WB 46-494.

1996) sees money as a social relation of credit and debt ‘which exists independently of the production and exchange of commodities’ (Ingham, 2004, p. 12). This is in fact the mechanism through which money is created, whether by banks as loans or by the state as public debt. After it is spent a few times the fact that it was created as debt is forgotten, as is the original social relation between creditor and debtor, and the perception of money as a ‘thing’ (Dodd, 2014) remains dominant. The view of money as an institution differentiates the structures of various monetary forms and the contexts in which they emerge (Ingham, 1998; Ingham, 2004; Smithin, 2000; Gilbert, 2005; Swanke, 2004). The third alternative to the commodity theory is Knapp’s state or ‘chartalist’ theory of money, from the Latin ‘charta’ for paper, according to which money is anything that the state will accept as payment for taxes (Knapp, 1973 [1924]; Wray, 1998; Wray, 2004a; Goodhart, 1998). According to this theory, money must refer to an authority from which it derives its legitimacy.

Our study seeks to discuss the possible combinations of these theories to understand the daily practices with money in Argentina between 1999 and 2013. Our empirical data was gathered across the country between 2001 and 2013 in a larger research project (Gomez, 2009; Gomez, 2015). The availability of contemporary data constitutes a relative novelty in the discussion on the nature of money (Tymoigne and Wray, 2006) and facilitates a reflection on the structural conditions under which socio-economic systems nest money, which have been discussed by other authors (Swanke, 2004; Dodd, 2014; Cohen, 1999; Blanc and Desmedt, 2014). The primary data on community currencies was gathered by means of interviews, surveys, focus groups and ethnographic methods. Provincial currencies have been followed in academic and grey material and primary data was gathered through interviews with experts and officials. The article first describes the background of monetary experiences in Argentina, and then presents a bird’s eye view on theories of money. It continues with the analysis of Argentina’s currency circuits at provincial and community levels in Sections 4 and 5. It concludes with reflections on how monetary practices relate to the theoretical approaches on money.

2. Argentina’s experimentation with money

During the crisis around the Millennium, the capacities of the Argentine state were being challenged and a number of monetary forms were circulating in multiple, stable and interlinked ‘monetary circuits’, a concept used loosely by Ingham (2004) and which is similar to that of ‘currency circuit’ defined by Kuroda (2008, p. 21) as the steady ‘coupling of a particular money and a particular trade’ concurrent in time and space but without stable exchange rates. Each one of the Argentine monies fulfilled the functions of unit of account, medium of exchange, means of payment and reserve of value for thousands of users. However, as a general trend, they acted poorly as units of account and reserves of value, while they did work as means of exchange and payment to a more satisfactory extent. Each one derived from different forms of credit relations and reflected specific institutional arrangements of impersonal exchange related to national or sub-national state sovereignty and sometimes limited to communities and networks.

In the mind of many Argentines, money is far from the untouchable state institution described in textbooks, and is closer to a flexible social construction that can be restructured at political will. The reasons for Argentina’s peculiar experience with money cannot be addressed in sufficient detail because of space limitations and to a significant extent they have been discussed elsewhere (Cortes Conde, 1989; Cortes Conde, 2005; Gerchunoff and Llach, 2005). Ingham (2004, p. 165-174) attributes Argentina’s monetary ‘fragmentation’ to a failure of the government to tax and to issue debt bonds nationally, but to various degrees these two phenomena are historically characteristic of all developing countries around the world (Herschel, 1978; Gordon and Li, 2009; Eichengreen and Hausmann, 2010). In contrast, the existence of extensive and concurrent monetary circuits at subnational and community levels in modern times is particular to Argentina. The main reason for this exception needs to be sought in the inflationary history of the country and the policies of successive governments. Yearly

inflation averaged 300% between 1975 and 1990, but mounted in cycles of accumulated budget and balance of payment deficits in hand with the political cycle; after elections were won, governments introduced stabilisation programmes to cure inflation and fiscal deficits (Kiguel, 1991; Streb, 1998; Streb, 1996). Peronist redistributive and populist policies aggravated the depth of the cycles. Stabilisation programmes repeatedly included changes in Argentina's unit of account with the elimination of digitsⁱ. On each occasion in which the unit of account changed, economic agents would inevitably reflect on the nature of money.

The government contributed to the construction of state money as a flexible institution in other ways and in 1962, for instance, paid public wages in small denomination bills of credit instead of regular money. The bonds were designed to function as reserve of value (they paid a low interest rate) but circulated widely as means of payment until they expired (Cortes Conde, 2005). In the 1980s the Argentine central government did not prevent two small provinces (Tucumán and Jujuy) from paying their wages with provincial debt bills, which circulated locally along national means of payment (Schvarzer and Finkelstein, 2003).

In turn, the US dollar became a second currency initially as unit of account to denominate high-value goods and contracts but later on to settle payments for daily necessities such as groceries. The inflationary period between May 1989 and the end of 1990 became a hyperinflationary surge with an increase in the consumer price index of 200% a month (July 1989). In 1991 the government implemented a currency board that pegged the peso to the US dollar, so in practice the monetary base would be aligned with inflows of foreign currency. The convertibility regime cured inflation for almost a decade but caused severe recessions until the currency board collapsed and economic activity plummeted between 1999 and 2003. In 2001-2002, Argentina had five different and concurrent monetary circuits. Because of space limitations this study will discuss in detail the two most peculiar monetary forms, which are the sub-national (provincial) and community currencies. We will focus specifically on the introduction of these types of money, their acceptance and their institutionalisation in the medium term.

3. Approaches to the origins and meanings of money

In a central book of reference, *The Nature of Money*, Geoffrey Ingham (2004) draws on Keynes, Searle and Schumpeter, among others, and states on page 12 that 'regardless of any form it may take, money is essentially a provisional "promise" to pay, whose "moneyness", as an "institutional fact", is assigned by a description conferred by an abstract money of account. Money is a social relation of credit and debt denominated in a money of account'. Ingham adds, however, that not all credit relations evolve into money, but only those that are first 'constituted as *transferable debt* based on an abstract money of account' (emphasis in original). In other words, where there is money, there is debt that can be cancelled with it and there is an abstract unit of account to quantify the debt. These statements are valid 'within a given monetary space', Ingham continues, that is the specific area where the claim of moneyness is enforceable, and refers to 'networks of credit/debt relations that are underpinned and constituted by sovereignty', referring to Aglietta and Orléan (1998).

Ingham thus summarises the main key points. First, money is a unit of account, an aspect that Keynes (1930) underlined as its primary feature and enables the measurement of debts, contracts and prices across time and space. Second, money is at the same time debt and credit that are transferred from one actor to another; Innes (1914) explained that creating money is an accounting operation of a creditworthy agent, the convergence of an act of crediting the client's account (thus creating a liability for the issuer) and crediting the issuer for the amount of the loan (thus creating an asset for the issuer). Third, money takes many forms because credit takes many forms and has various social and cultural implications. Fourth, money is an institution, a fact independent of any particular individual agent. Fifth, money is valid within specific monetary spaces defined by sovereignty, presumably a national state authority.

The last is a point of contention between the endogenous money approach and the chartalist approach and one on which the Argentine experience with five monetary circuits can cast light. Means of payment based on credit were accepted in trade long before there were official or central monetary systems and before nation-states used money as a symbol of sovereignty and collected taxes (Gilbert, 2005). Dodd (2014, p. 6) goes as far as stating that the 'state is unessential in the ontology of money' because money has existed when and where states did not. A single centralised money was unnecessary when the poor used barter and low denomination tokens, often privately issued and not easily convertible into the official money of the better-off (Gilbert and Helleiner, 1999; Wray, 1998). Graeber (2011, p. 211) offers a somewhat different account in which historical periods when physical money was dominant alternated with periods when credit as long-standing relations was dominant.

The endogenous credit money theory emphasises credit/debt relations between non-state actors (Schumpeter, 2006 [1954]). Rochon and Vernengo, for instance, note that money is 'a creature of banks rather than a creature of the state' (2003, p. 61) and sustain that banks create money in response to the demand for credit from the general public, especially businesses that need to finance production. The circuitist version adds that money is created endogenously within the economic system and takes the 'extrinsic value' of the production it enables (Gnos and Rochon, 2002; Wray, 1998). There is an influx when the credit in the form of money enters the circuit and an outflux when the debt is repaid to banks, and between those two moments credit-money generates a chain of transactions including the payment of wages and other goods and services in the circuit (Realfonzo, 2006; Graziani, 2003; Rochon and Rossi, 2003). The state is not absent; its roles are to define rules of creditworthiness that authorise banks to issue credit and to issue credit money to pay for its own expenses.

Money is a key institution of capitalism (Ingham, 1996; Swanke, 2004; Papadopoulos, 2009). Hodgson (2006, p. 2) defines institutions as 'systems of established and prevalent social rules that structure social interactions'. Institutions create reciprocal expectations which constitute an incentive for agents to reproduce them, although compliance is always imperfect. Institutions become 'self-enforcing' and Greif and Kingston (2011, p. 27) claim that 'from each decision-maker's perspective, the others' expected behaviour constitutes the structure motivating her to conform to the behaviour expected of her. But by conforming, she contributes to motivating others to conform too. Thus, the structure is self-perpetuating, and although it is beyond the control of each decision maker, it is endogenous to all of them taken together'. Swanke (2004, p. 85) makes a similar point and states that money operates as such because 'people expect it to be money', so if they expect a monetary form to be accepted in trade, then they will accept it as medium of exchange in trade. A final implication of money as an institution is that these evolve through history and Swanke (2004, p. 93) suggests that money became an institution 'when people who were not involved in its origins were introduced to it and accepted it as a concrete reality', which is consistent with the concept of reification in Berger and Luckmann (1966, p. 106). Money is created by actors in credit/debt relations and other agents join the monetary circuit accepting it as such because money is an 'institutional fact' (Searle, 2005). As Hodgson expressed it, 'institutions are simultaneously both objective structures "out there", and subjective springs of human agency "in the human head"'. That money becomes an institutional fact is particularly relevant to the case of the Argentine monetary circuits.

Argentina is far from a unique case in terms of monetary experimentation. Community, complementary, or alternative currencies tend to emerge in periods of depression or deep economic crisis. A recent example is the LETS mutual credit system (Croall, 1997), which was invented by Michael Linton on Vancouver Island during an economic crisis in the early 1980s. The largest and oldest contemporary example of mutual credit is the Swiss WIR (<http://www.wir.ch/de>), and Sardex in Sardinia (<http://www.sardex.net/>) is its most successful emulator to date.

4. Provincial currencies

By the end of the 1990s, the Argentine economy was collapsing under the stringencies of the currency board. Within a climate of economic demise, in 2001 the government imposed limitations on the amount of cash that the public could withdraw from their bank accounts. The restrictions affected more severely the lower-income informal firms that sell their goods and services in cash; the shadow economy was estimated at a stable one fourth of GDP (Schneider, Buehn and Montenegro, 2010). The crisis depressed tax collection, which led to a budget deficit that could not be covered by issuing money because of the convertibility programme, so the central government pursued more tax increases and budget cuts despite the rise of the unemployment rate to 16.4% by May 2001.

Considering the clientelistic nature of public employment and Peronist distributive politics at the provincial level (North, 2007), the Argentine provinces categorically refused to further reduce the expenses in their jurisdictions. The province of Buenos Aires was a typical example of Peronist clientelistic politics and was at the brink of default in 2001. It sought a loan from a consortium of national banks, which denied the credit but came up with an alternative plan. They would loan one third of the funds, while another third would come from budget cuts and the last third could be covered by a one-time issue of a two-year bill called Emergency Provincial Bond. The province accepted the proposal and issued promises to pay in the form of low denomination bills which were used to pay part of the wages of their public servants and political clients (Gomez and Wit, 2015; North, 2007).

It was no novelty that Argentine provinces issued bills that circulated as currency in their own unit of account, despite the opposition of multilateral organisations like the IMF. Provincial governments had issued local currencies back in the eighties, when the bills also circulated as currencies within the provincial territories. Some provinces had never stopped using them, such as Tucumán, which Théret and Zanabria (2009) discuss as part of a phenomenon they term 'monetary federalism'. With squeezed budgets, in 2001 and 2002 a dozen other provinces decided to follow the example of Buenos Aires and also issued their own currencies to pay wages and outstanding debts with suppliers. These monetary forms were then referred to as 'quasi-currencies' (Schvarzer and Finkelstein, 2003). In September 2001 the provincial currencies represented 5 per cent of the national monetary base; they later climbed to 25 per cent and 33 per cent in January 2002 and October 2002 respectively (Chelala, 2003), as the crisis aggravated and shrunk available public funds.

In terms of monetary creation, the provincial currencies were born to cancel an existing debt that provincial governments had with their workers, the wages. Those debts were denominated in national money in the employment contracts, but when the provinces could not honour them, they monetised the debts in a newly created unit of account and paid them in their own currency, thereby launching a parallel monetary circuit within their territories. Workers and suppliers did not have the option to reject provincial bills, but the currencies subsequently circulated as means of payment among shops and businesses in the provincial territories, hence extending the use of the provincial unit of account. The acceptance of the bills was not linked to any backing of intrinsic value or to other currencies in a monetary hierarchy, as described by Bell (2001).

Establishing a money of account at sub-national level seems in itself a political breakthrough. Chelala (2003) explains that the provincial bonds kept their value because of the depth of the economic decline (any money was better than no money at all), and because they could be used to pay provincial taxes and earned a 7% interest rate if kept as reserve value. A 7% interest rate was modest in comparison with the average 10% interest rate paid on 30-day bank deposits between 2001 and 2005 (World Bank Indicators, 2015). The second argument makes sense from a chartalist perspective because there was a pre-existing obligation of every inhabitant and business in the territory to pay provincial taxes, so the governors basically issued a debt bond

against that future obligation of their citizens to pay taxes. The concept of sovereignty is usually reserved for the national level, but the provinces stretched it to the sub-national level. The moneyness of the bills could be enforced on geographically bounded users in a country like Argentina, where governors can claim considerable local sovereignty (Théret and Zanabria, 2009). It is consistent with Keynes's conception of money as first and foremost a unit of account selected by a government and accepted as cancellation of taxes (Ingham, 2004; Wray, 1998; Knapp, 1973 [1924]). Although in a loose way, provincial monies related to subnational sovereignty and endorsed the political nature of the contract 'between the guarantor of the validity of money and its users' (Ingham, 2004: 49).

The state money approach, however, can only give a partial explanation of the acceptance of the provincial bonds because tax collection in Argentina is centralised by the national government. Provinces receive federal transfers and are allowed to levy taxes directly on real estate, stamps and permits, and a small percentage of the revenues made by businesses registered in their territories. The public acceptance of provincial bills within geographically limited monetary circuits went far beyond their taxes or the transfers from national tax revenues. The provincial monetary circuits worked as a chain of credits and debts that integrated provincial governments, public employees, and local businesses in a monetary circuit of 'circulating debt', using Schumpeter's term (2006 [1954]). Innes suggested that governments integrate monetary circuits not because they are the issuers of fiat money but because they are 'a great buyer of services and commodities' that can redeem debts by taxation (Innes, 1914, p. 168). In the case of the Argentine provinces, governments were not only big buyers in terms of trade but also big debtors in terms of outstanding payments, and had a claim of sovereignty within their territories. The combination of both outstanding debt and sovereignty allowed them to define a unit of account and issue currencies whose moneyness was accepted within geographically bounded monetary spaces.

The explanation would be incomplete if we did not consider that provincial currencies were also used by informal businesses that did not pay taxes and did not have outstanding credits or do business with the provincial governments. Informal enterprises became part of the provincial currency circuits, nevertheless, because any monetary form was better than none at all and they accepted the bills in exchange for their goods and services because others were accepting them as 'an institutional fact', at least for a while. In that sense, provincial currencies became an institution 'out there' and soon belonged to the 'self-enforcing' social knowledge of what can be considered money, using Greif and Kingston words (2011, p. 27). Swanke (2004) similarly described that the institution of money extends to those not directly implicated in the credit/debt relations that originate money.

The experience with provincial currencies was mixed. In some provinces they had a reactivating effect on the local economy while, in others, the clientelistic use of provincial currencies was exaggerated and they depreciated fast. The quantities issued climbed to a large percentage of the provincial gross value of production and/or budgets (Schvarzer and Finkelstein, 2003) and they fuelled inflationary processes. Supermarkets, for example, accepted provincial currencies as payment for their sales because they could redeem them in payment for provincial taxes or pay their workers' wages, but when the amount of bills increased beyond the supermarkets' tax obligations and capacities to circulate them in their own credit/debt relations, they started rejecting them or took them at a fraction of their nominal value. The experience resonates with Innes's (1914) indication of the limits to issuance in relation to the capacity of governments to redeem taxes in their own monetary form, but also in relation to the scale of production and exchange in a monetary circuit which give 'extrinsic value' to the currency.

Provincial currencies originated as a unit of account to quantify credit/debt relations. There was no collateral in the form of commodities or reserves, or link to harder currencies; the provincial monies were imposed on the provincial creditors, who were workers and suppliers, and that imposition was possible because of a certain degree of sub-national sovereignty and future tax

debts. The currency was not only redeemed as tax payments but triggered a chain of circulating debt within the provincial territory that subsequently reached even the informal agents that neither paid taxes nor sold products to the government directly. The further circulation of the currency was related to the extrinsic value of a local economy where goods, services and labour were being supplied and demanded within provincial monetary circuits. Velocity of circulation supported trade well beyond the monetary mass issued, although no estimations were made, and provincial currencies protected the circulation of products which partially provided the backing to the currency in circulation.

In conclusion, there was a significant untapped spare capacity of extrinsic value in the provincial economies that was only monetised in the additional local currency circuit. It was possible to create more money at the local level because there was local backing to spare that was not being used. The relative success of provincial monetary circuits suggests that explanations on the nature of money require a combination of theories to fully account for why users accept money, sustain its value, and subsequently expand the circuit in scale and scope of users.

5. Community currencies: money without state backing

Years before the provinces issued bills, Argentines had access to a family of community currencies launched in 1995. In 2002, during the peak of the crisis, these were used by about 20% of the economically active population, according to some sources (Ovalles, 2002). The name given to the Argentine Complementary Currency Systems was *Redes de Trueque* or Exchange Networks, and they were one of several income-generation schemes launched in reaction to the neoliberal reforms of the nineties (Gomez, 2009; Pearson, 2003; Gonzalez Bombal, 2002).

The first *Trueque* group was established with 30 neighbours in a former industrial suburb of Buenos Aires in 1995. It was a spin-off of the activities of two environmentalist NGOs which promoted growing fruits and vegetables in urban gardensⁱⁱ. At some point, the participants started exchanging excess vegetables to make jams, preserves and so on and then trading them with others. The initiators thought it would be a good idea to organise it more systematically and tried several schemes until a method became stable around May 1995. The participants would bring products every Saturday and the organisers set their prices in an imaginary unit of account. If the participant agreed with the prices, which happened almost always, the goods stayed on offer and the organisers recorded a credit for the participant equal to the value of the products denominated in the group's unit of account. After the pricing process, the participants chose products up to the amount of their credit. The remaining balances were usually small and were transferred to subsequent meetings, and the same happened to left-over products.

The original group used a fictional unit of account to price goods because it wanted to indicate that this was not a market but neighbours drawing goods from a common pool to which they had contributed. Prices were never at par with those in pesos but blended notions of gift and neighbouring with market exchange mechanisms. The organisers defined prices by relating the value, for instance, of a peach jam to the peaches harvested by someone in the group, the labour used, and ingredients bought in pesos. By creating a unit of account, the *Trueque* also created a separate price structure that bore a close relationship to the internal supply and demand of the products in the group. Kuroda (2008) discusses differentiated price structures per currency circuit in similar terms, showing separate relationships between prices in a unit of account and the supply and demand in each currency circuit. The unit of account was given the significant name of *crédito* to reflect interpersonal trust and existed only as ghost money on a paper notebook. It was an accountancy system of credits and debits of participants in relation to a collective pool of products. During fieldwork, the initiators and neighbours explained that using a commodity of small value as means of payment did not make sense because they could not

think of any commodity that would be absolutely widespread, meaningful, valuable, small and light-weight. 'If it's a basic necessity, then you eat it or use it, and if it's not, what's the value, why keep it?', participants reasoned. Besides, the neighbours wanted to see 'numbers that could be easily compared to other numbers, and a commodity that can show information in that way that doesn't exist' (Interview with Initiator A, 14/6/2004). A unit of account allowed the participants to compare values to their own capacity to pay, as a precondition for trade. The experience substantiates empirically the implausibility that one unit of account would have resulted spontaneously in exchange and confirms Keynes's (1930) reasoning that a unit of account depends on specific social agreements between creditors and debtors that cannot occur naturally among many agents. Moreover, accountancy money works better at these small scales because such a medium of exchange is not a commodity (its price is zero and its interest rate is zero). In the *Trueque* the functions of unit of account and medium of exchange are clearly stronger than that of store of value, although the latter still applies in the sense of storing purchasing power in the short term, which was all that such a market required.

The initiators perfected the pricing system in the first months and hence defined the value of the unit of account. They also observed that the effects of the scheme were more significant than they had anticipated. The *Trueque* supported households' economies and the exchange meetings of Saturdays were constantly expanding their scale, scope, duration and number of participants. The initiators felt that the impact of the scheme would strengthen if it grew beyond its uniqueness. They started searching for partners and succeeded in replicating the scheme when four more groups were settled across Buenos Aires in 1996. Each group used a single unit of account and a separate notebook for records, but they wanted to trade with each other, which meant pricing a single product in two different units of account and recording the transactions in two notebooks. When the total membership reached about 100, the accountancy of credits and debits became too burdensome, and one of the initiators suggested, 'what if we print money? We can make notes in a print-shop,' (Initiators' group interview, 4/8/2004). Paper money was introduced by the end of 1996 using the *crédito* as single unit of account across all five exchange groups, although prices still differed after local conditions of supply and demandⁱⁱⁱ. Paper money was cheap to produce, facilitated payments and supported the expansion of the scheme, which mainly attracted participants who sought to protect a middle-class lifestyle with some extra income.

The scheme became more structured and went from being a curious experiment to an invaluable income option for thousands of households. Participants entered the circuit paying a small contribution in pesos, which were used to pay for the printing of the paper money. They subsequently sold their goods and services for *créditos*, thereby holding a claim in *créditos* on the goods and services of others in the circuit, and created a chain of credit/debt relationships. The *crédito* was initially defined as 'a social contract among peers' (Interview with Initiator A, 4/11/2006). It was neither convertible to the peso nor backed by capital in commodities or stronger currency, because nobody in the scheme had such capital, although it was informally backed by circulating products. The introduction of paper money also stretched the cognitive distance between the *crédito* as a currency and the trust required in interpersonal credit/debt relations. The organisers did not fully understand the negative impact of the expansion on trust and assumed that new participants would be reliable and committed to their non-capitalist market. They would soon be proved wrong and in 1997 they had to deal with forgery, which they dismissed as a one-off event.

Concurrently with the expansion, new leaders emerged and promoted the idea that to sustain the acceptance of the currency within a 'closed circuit' it was enough to couple the issuance of money with an equivalent growth of trade in each currency circuit. The more diverse leadership established the rule of giving a loan of fifty *créditos* to each new participant to start trading against the promise that the participants would give the *créditos* back if they left the scheme. Each new member hence contracted a debt with the issuing group and generated a fixed influx of currency into the circuit. In technical terms, the scheme created money endogenously along a

horizontal supply curve (Wray, 2004b; Realfonzo, 2006). The value of the injected *créditos* was 'extrinsic', in Wray's terminology (1998), because the entrants increased the supply in the circuit by an equivalent amount in kind (goods and services of own production or second-hand stocks).

By 2000, when the regular economy and the quantity of pesos were shrinking, the *Trueque* was booming. By 2002 there were hundreds of local exchange clubs with a total estimate of 2.5 million households in 5,800 locations across the country (Ovalles, 2002), an unknown number of different *créditos* and thousands of groups working in different ways. Some groups used their own local unit of account while others were articulated with a common unit of account for several locations. The initiating network became the largest one and integrated hundreds of clubs across the country with one unit of account and a poor accountancy system.

At the same time, the *Trueque* leadership was deeply divided in opposing groups that supported different visions on reinventing the economy, money and politics (North, 2007). While the initiators established a short-lasting collaboration with the government in 2001, many other participants and leaders in the *Trueque* did not want to relate to a state they saw as corrupt and unreliable. The state did not legally regulate the *Trueque* because it underestimated the importance of the scheme and had a myriad of challenges to its sovereignty besides the monopoly on the issuance of money. Eventually, Peronist political brokers would see the *Trueque* as a challenge to their informal powers and would undermine it at the grassroots level and through the mass media (North, 2007; Gomez and Wit, 2015).

The *Trueque* started with households of the fallen middle class of Argentina but eventually integrated a larger public, promoted start-ups, creativeness and self-employment, as well as speculation, abuses and inequalities (Gomez, 2010; González Bombal and Luzzi, 2006). The clubs became full of second-hand goods in comparison with limited production and supply of basic necessities such as food, so it plummeted at the end of 2002 in the midst of widespread forgery, internal scandals and power struggles among the leaders (North, 2007). By 2006, there were about 120,000 participants left in 350 local exchange clubs (Gomez, 2009).

What made the *crédito* acceptable for almost a decade by hundreds and then thousands of users? From a state theory of money approach, the phenomenon appears as a curiosity and shows the final relevance of a formal authority to sustain money, but the *Trueque* was too large and lasted for too long to simply dismiss it. We see it as one example of dozens of other monetary circuits around the world that exist in parallel to state money (Seyfang and Longhurst, 2013; Blanc, 2012). In order to explain community currencies in Argentina we need to draw on theories in which state sovereignty is not central. The conception of a 'closed circuit' referred by the organisers of the *Trueque* is the key to understand the chain of credit/debt relations described in the circuit money theory by Schumpeter (2006 [1954]), Innes (1914, 1913) and others (Parguez and Seccareccia, 2000; Rochon and Rossi, 2003). These authors did not deny the important role of the state in creating money, but looked mainly at what Schumpeter called 'circulating debt' (2006 [1954]).

Money supply in the *Trueque* was endogenous and designed with a structure of influx-outflux along a horizontal money supply curve. It resonates with the circuitist approach, although this theory applies to other agents (banks that give credit and firms that contract debt) to launch chains of transactions with suppliers and workers (Realfonzo, 2006; Graziani, 2003). In the case of the largest *Trueque* networks, organisers acted as bankers of the monetary circuit and households became indebted to them and the organisation in order to join the circuit of transactions. The fact that non-government and community-based organisations can create money is an unlikely interpretation on who can create money, but Innes (1914, p. 168) suggested that 'money in one form or another is, in fact, issued by banks, merchants, etc.' and hence specified that money has many forms and its issuers are similarly varied. At the same time, Innes (1914) underlined the requirement of establishing careful accounting frameworks as

those developed by banks, and which the initiators' network of the *Trueque*, for instance, did not have. Credits given to each participant when joining were not always properly registered or compared with their contribution in production to the monetary circuit. This explains why the *crédito* did not last as money on a large scale. Other groups within the *Trueque* implemented participative management and more careful accountancy systems, but the distinction was not sufficiently understood by the general public or the mass media.

The social and economic conditions were critical for the rapid institutionalisation of the *crédito*. Tymoine and Wray (2006, pp. 3-4) suggest that the creation of a unit of account has institutional consequences because it becomes socially recognised and structures new economic practices of exchange. In Argentina, the use of a separate unit of account gave the signal from the beginning that the *Trueque* was a parallel monetary circuit with a life of its own, an institutional fact that could exist independently from the specific neighbours and organisers that originated it. It evolved into what Ingham characterises as 'transferable debt' (2004, p. 12) because the original credit/debt relation through which the *crédito* was created evolved into an impersonal abstract token for value and means of payment after it had been transferred repeatedly. During fieldwork we noticed that many participants could not explain how the system worked or how it started. It resonates with Swanke's (2004) claim that once the institution of money is in place, the actors simply forget how it was created and adopt it in their use. The *crédito* similarly became a self-reinforcing institution in which every participant accepted it as money because other participants also accepted it as such. As it happens with other informal institutions, the extra-legal or informal self-reinforcement of the *crédito* was imperfect.

We highlighted the institutional and circuitist aspects to explain the moneyness of the *créditos*, but Chartalism is not irrelevant to the analysis. While most *Trueque* participants did not know the details of how the *créditos* originated, many of them referred to an imagined authority regulating the system and some local organisers travelled considerable distances to get the currency of the initiators in Buenos Aires because those *créditos* appeared to them more creditworthy than others. The original *créditos*, however, were no more legitimate under the Argentine law than a photocopy, but participants and local organisers assumed that the initiators had 'monetary authority' to print them. When questioned why they did not print their own complementary currency notes in a local print-shop, these local organisers replied 'how could I do that?' and insisted that it was 'forbidden by the authorities'. Moreover, other groups printed their own *créditos* locally and emphasised that these were a key tool for social transformation and local resilience (North, 2008). Both attitudes suggest that the causality of the link between authority and money works in both directions. Chartalism identifies authority as the main condition to create money, but the opposite assertion seems to stand as well and creating money generates monetary authority in the hands of the issuers. This power is normally captured by modern states because at some point in history the perception of monetary authority was allocated to the state. In other words, creating a unit of account and a currency circuit confers authority to the issuers, who further accumulate power. Ingham (1999, p. 80) mentions that money is a 'transformative power', and indeed issuing money reinforces the power of the agents that can persuade others to accept their debt in the form of money.

Nevertheless, the *Trueque* leaders were unable to prevent the massive forgery of currency, which North (2007) attributes to the organised actions of Peronist local leaders and brokers. An organiser expressed that by 2002 the *Trueque* collapsed because it was 'full of notes and empty of goods'. Skaggs (1997) reminds us that currency is the evidence of services having been rendered but an equivalent not received though it can be demanded at any time. When the *Trueque* became empty of goods and services that participants could demand for their *créditos*, trust broke down and the system collapsed in a matter of months. The circuit that gave extrinsic value to the *créditos* dried out, so the unit of account collapsed.

In order to explain community currency systems, we have combined institutional approaches and the endogenous credit theory of money. We identified a group of agents involved in the first credit/debt relations that originated the unit of account and used the currency as means of payment and medium of exchange. A second group of agents received currency and subsequently transferred it; for them it was an institutional fact, so it was unnecessary to reflect on its origin. It created mutual expectations of acceptance and its rules were self-enforcing, although with imperfect compliance and only for a certain time.

6. Conclusions

This paper discussed monetary circuits in Argentina that do not fit well in the main approaches to the nature of money, and which were too large in scale and duration to be dismissed. They were, in fact, large and complex cases of monetary plurality in which concurrent but stable currency circuits exist in a specific time and space. The reasons why monetary plurality was exceptional to Argentina relate to its monetary history of high inflation and the peculiar ways in which governments and economic agents experienced money as a social construction. Additional monetary circuits emerged and this research focused on two of them: provincial currencies issued by subnational governments that circulated within their territories and community currencies created by grassroots organisations for the voluntary use of social networks. The monetary forms were introduced as units of account to denominate the value of debt/credit relations and were accepted as means of payment and media of exchange, while the function of store of value was relatively limited. They never used commodities to trade and were not linked to reserves of intrinsic value. They partially relied on the extrinsic value of the monetary circuits they sustained.

A discussion of the nature of money based on current empirical data is a relative novelty in the literature. While analysing the introduction, acceptance and circulation of the Argentine provincial and community currency circuits, we found that daily monetary practices are inevitably more complex and heterogeneous than the theories to approach them. Each theory addresses a specific aspect or set of features of the Argentine monetary circuits, so we combined different strands of theory to achieve explanations that would best accommodate the complexity of daily experiences with money. We approached money as circulating debt, following Schumpeter (2006 [1954]), Innes (1914) and others (Wray, 1998; Wray, 2004a; Ingham, 1996; Ingham, 2004). In turn, provincial and community currencies represent institutions because they have normative and structuring content that guide agents' interactions and create reciprocal expectations. At the same time, the Argentine case required us to relax some of the assumptions and definitions of the state and endogenous money approaches, which led us to reflect on the possibilities and limits to combining theories on the nature of money.

We referred to the state theory of money because provinces could claim sub-national sovereignty on their territories and the provincial currencies were accepted to redeem taxes. However, chartalist approaches strictly reserve the concept of sovereignty for the central state in a normative conception that links authority, territory and population. We have shown that sub-national sovereignty enabled the issuing of money under 'monetary federalism', which relates to the capacity to redeem some sub-national taxes (Théret and Zanabria, 2009). The relationship between sovereignty and money appears as more diverse than strictly advanced by the chartalist approach, especially in contexts in which state authority is fragile or challenged. Issuing currency implies powers to make others accept a debt as means of payment and its subsequent transferability in a circuit of credit/debt relations. It confers authority to the issuer, although in the case of the community currencies it was an imagined and informal type of authority in the hands of community organisations. As a matter of fact, a large proportion of the states in developing countries could be described as fragile states (Besley and Persson, 2011), while the monopoly on issuing money is also being challenged in developed countries by groups of citizens that reclaim the rights to use alternative means of payment (Seyfang and Longhurst,

2013), often with local governments as partners (Blanc and Fare, 2013). In order to be relevant to a larger number of countries, the chartalist approach could broaden the concept of sovereignty and the situations in which authorities can effectively choose the unit of account in which they accept tax payments.

The endogenous money approach refers mainly to banks as issuers of credit/debt that is transferred as money to support production. It is clear from the Argentine community currency circuits that not only banks can issue money but also issuers that meet a set of conditions, such as reputation and leadership, coupled with social cohesion among the first recipients of a currency or serious economic need in a crisis. Innes (1914) allowed for the possibility of multiple issuers and mentioned, for example, merchants, but cautioned that issuers should emulate banks in terms of rules such as keeping adequate accountancy and relating the amounts issued to the extrinsic value of the circuit. It was not the case in the largest *Trueque* network and that failure led to its demise. In comparison, Sardex maintains thorough records and full tax transparency (Sartori and Dini, 2016).

From a policy perspective, concurrent monetary circuits may offer an interesting policy tool at local level to increase the flexibility of the monetary system and to adapt to the requirements of local economies or during periods of crisis. The claim of sub-national sovereignty increases the appeal of such circuits, but within boundaries of acceptance and circulation to a specific territory in which moneyness can be guaranteed. In Argentina some provincial currencies created a positive impact when the amounts issued kept a strict relationship to the provincial gross value of production and provincial budgets, while community currencies worked as long as there was a strict relationship to the number of participants and the production they added.

From a theoretical perspective, we found that the main distinction among the approaches to the nature of money is related to conceiving money as a social construction or a device of the market. The commodity theory can explain money as a disembodied and neutral technical device without reference to social and political agreements. The theory of money as credit/debt relations relies on understanding the social and political construction that sustains money. We have shown that anti-metallist and credit theories of money can work together because these approaches vary in emphasis but share the ontological foundation that money is an institution that changes in time and varies in format together with the nature of credit/debt relations. As an institution, money is nested in the circuits from where it emerges and further binds agents in structured relations with normative and transformative implications.

In recognition of this variety, Dodd (2014) provides a very broad array of possible definitions of money, and an in-depth discussion of many theoretical perspectives from sociology, anthropology, economics, cultural theory, and post-modern philosophy. Evans (2009) points to a fundamental sociological question regarding the ontology of money: does ‘money change values’, i.e. is it a ‘corrosive force’ in society – as Simmel, Marx and Polanyi thought – or do ‘values change money’, i.e. do social constructivist processes endow money with social values that shape it to fit given social contexts – as Veblen, Bourdieu, and later Zelizer (1994) proposed? The evidence from Argentina suggests that both outcomes are possible, depending on the economic scale of the monetary experiments; on structural features such as accounting system, taxation, rate of interest, and inflation; and on the governance, transparency, and accountability framework adopted. Trust pervades all these dimensions. It is required to get things started, and must be protected or all is lost.

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ⁱ Successive programmes wrote off a total of thirteen zeros in four changes of units of account between 1969 and 1991. The 'Peso Moneda Nacional' circulated between 1881 and 1969 and was replaced by the 'Peso Ley' at a rate of 100 'Peso Moneda Nacional' = 1 'Peso Ley'. In 1983 the 'Peso Ley' was replaced by the 'Peso Argentino', which was worth 10,000 'Peso Ley'. In 1985 the 'Peso Argentino' was replaced by the 'Austral' at a rate of 1 'Austral' = 1,000 'Pesos Argentinos'. In 1992 the 'Austral' was replaced by the 'Peso Convertible' at a rate of 1 'Peso Convertible' = 10,000 'Australes'. Billetes Argentinos, F. 2008. Modelos de billetes de la Republica Argentina. Buenos Aires.

ⁱⁱ The two NGOs were led by Horacio Covas, Carlos de Sanzo and Ruben Ravena

ⁱⁱⁱ The groups were separated by about 2 hours' travelling time in different locations of the metropolitan area of Buenos Aires.