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and Parallel Moneys:  
The fatal attraction  
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**Franco Passacantando**

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# Italexit, Debt Cancellation and Parallel Moneys: The fatal attraction for the Argentine solution

Franco Passacantando

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## Summary

This paper aims to show the extraordinary complexity of an exit of Italy from the euro through a comparison with Argentina, which in the 1990s adopted a currency board with full convertibility of the *peso* with the dollar. According to some, the experience of Argentina, which started growing rapidly a few years after abandoning that regime and defaulting on its debt, shows that leaving the euro and restructuring the debt could give “new life” to Italy. This conclusion is profoundly wrong for at least two reasons. First, Argentina had kept a national currency, the *peso*, and a *peso*-based payment system, alongside that in dollar, while Italy would have to create a new currency and, most importantly, a new payment system for interbank transactions, since the one currently being used only accepts euros and is centrally managed by Eurosystem. In this scenario, the public would lose full access to their bank accounts for a long time and the country would be isolated from international financial and currency markets. Secondly, in Argentina the public debt in relation to GDP was less than half that of Italy and mainly held by foreign residents. Debt restructuring in Italy would slash the wealth of Italian households and have a major impact on banks, which have already been severely hit by the double crisis of recent years. To avoid these risks some political forces have recently proposed the creation of a new parallel currency that would circulate alongside the euro. The paper shows how in Argentina, the creation of “quasi monies” or fiscal currencies by several provinces did not have a positive effect on growth and was one of the main factors that precipitated the crisis.

Keywords: Italexit, debt restructuring, parallel currency, payment systems.

JEL Codes: E58, E65, G09

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## 1. Introduction.<sup>1</sup>

In recent months economists in Italy have been debating the economic and political reasons for the euro and the consequences of a possible abandonment of the single currency. This discussion is taking place against the backdrop of a public opinion increasingly hostile towards the euro after a crisis that generated exceptionally high levels of unemployment and a substantial loss of productive capacity. For some, only the return to a national currency, the adoption of a flexible exchange rate regime and full autonomy in the conduct of monetary and fiscal policy could restore growth.

The ability of economists to analyze the consequences of a break-up of the euro is enormously complicated by the lack of comparable historical precedents. The cases most frequently quoted are the separation of the Czech Republic from Slovakia in 1992-93 and the breakup of the Soviet Union in 1992. However, in these countries the level of sophistication of the financial system was not comparable to that of the euro area countries.<sup>2</sup> More interesting is the case of Argentina because it is the most recent, it involved an economy with one of the most advanced financial systems among the emerging economies and that in 1991 adopted a convertibility regime with respect to the dollar which for a long time was considered irreversible.

When that regime was abandoned in 2002, the devaluation of the *peso* and the debt default caused a very sharp recession (Section 2). However, starting in 2003, Argentine GDP grew at rates of around 8 percent and unemployment declined substantially. The Argentine solution, as cited for example by the M5S leader Beppe Grillo, would thus show that the recovery of monetary sovereignty and debt cancellation would give new life to the countries most affected by the euro crisis.<sup>3</sup> Other economists in favor of Italexit, such as Bagnai (2002), point out that in addition to Argentina, some Asian countries in 1997, and Russia in 1998 grew at high rates after a devaluation of their exchange rate and debt restructuring. Stiglitz (2017) argues that Argentina, like Greece, had been strangled by austerity, but thanks to devaluation and debt restructuring it has managed to get out of the crisis. He acknowledges, however, that "It is not the same to devalue an existing currency than to create a new currency in the midst of a crisis".

This paper will first analyze the differences between the case of Argentina and that of Italy if it were to decide to exit from the euro. Second it will use the Argentine case to highlight some technical aspects of a monetary system that are usually neglected or loosely represented by the advocates of Italexit and are not properly considered even by the supporters of the euro. In particular, this paper will analyze the technical difficulties posed by the creation of a new currency

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<sup>1</sup> I thank Carlo Bastasin, Lorenzo Giammo, Marcello Messori, Francesco Nicolò e Fabrizio Palmisani for their comments.

<sup>2</sup> States that succeeded the Soviet Union "were able to limit the destabilizing financial consequences because their banking and financial systems were not well articulated, so that the limits on deposit withdrawals were relatively effective. They could limit the substitution of foreign assets by imposing or simply maintaining exchange controls." Barry Eichengreen (2007).

<sup>3</sup> "Le's do like Argentina!!! In eight years they succeeded in sweeping away the crisis and you know why? Because even though they fell into the most absolute darkness, they didn't have states which prevented their crisis escalating over all levels. We have France and Germany that in order to prevent us from defaulting (and in order not to loose their credits) would prolong our agony to the infinite" [www.beppegrillo.it/2011/10/italia\\_argentin.html](http://www.beppegrillo.it/2011/10/italia_argentin.html) (author's translation)

and, above all, of a new national payment infrastructure that would replace the centralized European system currently being used by all euro area countries (Section 3). This is a point mentioned by some economists, such as Barry Eichengreen (2007) and more recently Codogno and Galli (2017), which will be further elaborated here. As a background, the paper will also recall the overly forgotten advantages that the harmonization and centralization of the payment system in Europe, in parallel with the creation of the single market, has brought to consumers, businesses and financial intermediaries.

It is beyond the scope of this paper to make an in-depth analysis of the macroeconomic impact of a devaluation, a topic that others have analyzed more extensively (e.g. Messori 2017). Rather, we will dwell on the difference between the debt restructuring that Argentina carried out and what would have to be implemented if Italy decided to restructure its debt (Section 4). We will also mention the possible exchange rates regimes that could be adopted following a euro-exit and the problems that each of them would entail (Section 5). Lastly, the experience of issuing parallel currencies in Argentina will be used to highlight the dangers of this option and the difficulty of applying it on a European scale (Section 6).

## **2. The crisis of the fixed exchange rate regime in Argentina.**

The convertibility regime of the national currency, was introduced by Argentina in 1991, with the aim of restoring market confidence after years of hyper-inflation. Between 1975 and 1991, the average annual growth rate of consumer prices was 315 per cent, with a peak of almost 5,000 percent in 1989 (Guidotti and Nicolini 2016 p. 4). The stabilization mechanism introduced in 1991 was deliberately very rigid. It was a *currency board* in which each unit of the national currency issued - the *peso* - had to be covered by a reserve in dollar. The policy was initially very successful as it led to a reduction in inflation, capital inflows and economic recovery. In the opinion of international commentators, Argentina became one of the star performers in Latin America. Convertibility was increasingly presented as a permanent monetary regime and the *mantra* of the authorities of that period in Argentina became "no more than one *peso* for one dollar, forever" (de la Torre et al., 2003). At some point, the possibility of adopting the dollar as a national currency was taken into consideration.

### **The events.**

The difficulties started after the devaluation of the Brazilian *real* in January 1999, which increasingly raised questions about the government's ability and willingness to defend the convertibility regime, which was also faced with a strong dollar revaluation. That period was characterized by high political instability. The 2000 presidential election was won by de la Rúa who had to confront an increasingly difficult economic situation in a political climate marked by scandals and recurrent government crises. The government was often reshuffled. In particular the economy minister was changed three times until the nomination of Domingo Cavallo in March 2001.

Between February and August 2001, the public started withdrawing deposits from the banks and exchanging pesos with dollars.<sup>4</sup> In order to restore markets' confidence, the government adopted a balanced budget policy and introduced various restrictive measures, such as cuts in wages and pensions (by 13 percent), export subsidies, and controls on capital movements. Rather than reassuring the markets, these measures heightened the fears of a devaluation. This eventually led to a run on bank deposits both in pesos and dollars which affected all categories of banks, "probably as a result of increasing fears that a major devaluation could lead to bank failures and some form of deposit confiscation" (de la Torre p.64). Spreads on government bond yields rose from 800 to over 4000 basis points over the year.

**Table 1. Argentina: Main Economic Indicators**

	1999	2000	2001	2002	2003	2004
<b>GDP at constant prices</b>	-3.4	-0.8	-4.4	-10.9	8.8	9
<b>Consumer Prices (average)</b>	-1.2	-0.9	-1.1	25.9	13.4	4.4
<b>Current Account Balance (%GDP)</b>	-4.2	-0.9	-1.4	8.5	5.8	2

Source: IMF

In December 2001, the crisis turned into a panic with tragic political and social consequences. To curb the hemorrhage of bank deposits, the Minister of the Economy imposed a limit on the withdrawal of money from banks, the famous *corallito*. This measure was met with great popular anger. On December 19, thousands of people flocked to the squares of Buenos Aires demanding the government's resignation while plundering supermarkets and pharmacies.<sup>5</sup> In the clashes that followed, about 20 people died. At the end of that day Cavallo left office and President de la Rúa declared a state of siege for 30 days before resigning in turn.

Within two weeks, four presidents were elected; in his inauguration speech on December 23, the fourth, Adolfo Rodríguez Saa, announced his intention to issue a third currency the Argentino. The motivations were similar to those put forward in Italy today by those who propose the introduction of new payment instruments to cope with pressing spending needs while preserving the currency regime. However the market interpreted this initiative as the prelude to abandoning the regime. According to Reuters news, "Anticipating an eventual loss of the *peso*, many businesses hiked prices by as much as 20 percent over 72-hour period following Rodríguez Saa's selection as interim president" (Stratfor Enterprises 2001). Market pressures intensified and on 31 December Rodríguez Saa was forced to resign.

On January 3, 2002, Argentina formally defaulted when it missed an interest payment of \$20 million on a bond in Italian liras. The new President, Eduardo Duhalde, took three drastic measures: elimination of the convertibility regime, mandatory redenomination of contracts from dollar into *pesos* and a debt moratorium under the promise to start negotiations with the international private

<sup>4</sup> For a detailed illustration of those events, see IMF (2003 b) and de la Torre et al. (2003)

<sup>5</sup> "Reelings from Riots, Argentina Declares a State of Siege" New York Times dec.20 2001 <http://www.nytimes.com/2001/12/20/world/reeling-from-riots-argentina-declares-a-state-of-siege.html>

sector on a debt restructuring<sup>6</sup>. This promise was kept only in 2005 when the economy was well into its recovery. The debt of international non-governmental investors was then subject to a *haircut* of about 75 percent, one of the highest in history.<sup>7</sup>

The uncertainty following the exit from the currency regime and the low liquidity of the *peso* currency market caused a sharp depreciation of the Argentine *peso*. While in December 2001 a dollar could be bought with one *peso*, only six months later a dollar was worth 3 pesos and 90 cents. The depreciation, in terms of Real Effective Exchange Rate (REER), was 57.5 percent, much higher than what most analysts and investors had predicted, even taking into account the well-known overshooting effect. At the end of 2004, the real exchange rate was still 50 percent below the pre-crisis level.

Starting in 2003, the economy began to recover. As a result of strong demand for consumption and investment, GDP grew by almost 9 percent both in 2003 and in 2004. Restrictions on bank deposits were gradually eliminated and in 2003 the parallel currencies were withdrawn from circulation. Argentina also benefited from the rapid growth of Brazil and its other major trading partners, as well as from very low world interest rates. The unemployment rate, after reaching a peak of 21.5 per cent in 2002, improved continuously in the following years (Weisbrot et al., 2011). However, the country has never fully reestablished conditions of monetary stability. After the sharp acceleration in 2002, inflation fell back in the following years, but in 2007-2008 it was again over 30 percent. In recent years, after a deceleration in conjunction with the 2009 recession, it climbed to 40 percent before dropping to around 25 percent today. Controls on capital flows were not completely eliminated until December 2015.

**Table 2. Argentina: Exchange Rate and Competitiveness**

	2001	2002	2003	2004
Per capita GDP (thousands of \$)	7.4	2.5	3.5	4
Exchange rate against \$ (end of period)	1.0	3.36	2.94	2.97
Real Effective Exchange Rate (REER) (average, 2001=100)	111.8	49.5	55.9	56.7
Percentage change of REER	5.9	-57.5	8.9	-4.0

Source: IMF

Note: The Real Effective Exchange Rate (REER) is the country's weighted average exchange rate relative to a basket of other currencies adjusted for inflation. (+) appreciation (-) depreciation

### The vicious circle that amplified the crisis.

<sup>6</sup> The government had long been prepared for default as "the government had quietly shifted its reserve and other financial assets from the Deutsche Bank in New York to the Bank of International Settlements in Basel Switzerland or to banks in Argentina". Shapiro (2006) p.8.

<sup>7</sup> IMF 2005 p.13. The IMF was fully paid back in early 2006.

As mentioned, the first possible cause of the crisis was the appreciation of the real exchange rate. The currency board regime was often considered to be the main impediment to preserving the competitiveness of the country in the face of a dollar appreciation. However, as Guidotti and Nicolini (2016) have shown, the appreciation of Argentina's Real Effective Exchange Rate, between 1991 and 2000, was one of the lowest among the Latin American countries and the growth of exports one of the highest, even though many of these countries had a flexible exchange rate. (see Table 3). It is true that since 1999 the situation deteriorated and the current balance became negative but the imbalance started to decline in 2001 (Table 1).

**Table 3. Real Effective Exchange Rate (REER) and Export Performance**  
(Percent changes between 1991 and 2000)

Country	Argentina	Brazil	Chile	Colombia	Ecuador	Mexico	Peru	Venezuela	Average
<b>REER</b>	8	13	22	-2	58	18	1	86	26
<b>Exports</b>	121	74	115	83	77	269	104	125	124

Source: Guidotti Nicolini (2016) p. 30

A second factor, which the IMF considered the most important, was fiscal policy. Indeed, during the period of the currency board the government had progressively relaxed its fiscal policy taking advantage of the possibility to borrow in dollars at very low rates. Even this factor alone, however, does not explain the crisis because debt, albeit rising in relation to GDP, reached about 50 percent at the end of 2000, certainly not a very high level. The third factor was real growth. The sudden stop in capital inflows following the devaluation of the Brazilian *real* led to a contraction in economic activity of about 3.4 percent in 1999. However, the contraction slowed down in 2000 and even seemed to reverse at the beginning of 2001.

None of the three factors was decisive, but it was rather their combination, in a situation of growing political uncertainty, that set in motion the vicious circle that led to the crisis. A monetary regime that had eliminated the cost of converting the national currency into dollars was very vulnerable to changes in expectations about the government's willingness to implement fiscal policies consistent with the needs imposed by the currency regime, in the face of a recession. These fears pushed rates up, which in turn raised doubts about the sustainability of the debt. The expectations of debt default and devaluation eventually became self-fulfilling.

### **3. The creation of a new currency and a new payment system.**

The supporters of Italy's exit from the euro claim that the modalities of transition to a new currency could be defined over the weekend, with the possible addition of a few bank holidays. The government would decide by decree that the euro was no longer the official currency and would

give legal value to a new one, whose value would be set at a ratio of 1 to 1 with the euro.<sup>8</sup> The Government would then need to create a new currency and a new payment system, i.e. a set of rules and procedures to make payments and settle financial transactions in that currency.

### The substitution of banknotes.

Cash substitution is probably not the most relevant issue from an economic point of view, but it is certainly the one with the greatest social impact because nothing disrupts the population's most vital needs more than the withdrawal from circulation, without proper warning, of the current notes and coins. In Argentina, the problem did not arise because the *peso* had never stopped circulating and accounted for about a third of all cash: about \$ 16.5 billion at the end of 1999, corresponding to 5.7 percent of GDP.<sup>9</sup> Argentina's central bank had a current account in peso and one in dollars, used to ensure convertibility. As Table 4 shows, between 2001 and 2002, the account in *peso* jumped from 2.0 to 10.4 billion pesos while that in other currencies, mostly dollars, dropped from 12.8 to 1.0 billion.

To have an idea of the problems that would imply the substitution of banknotes, one should consider that the stock of currency in circulation in Italy at the end of 2016 was 181 billion euros, or about 11 percent of GDP.<sup>10</sup> If in the transition from the old to the new currency the old payment instruments were no longer be usable and new ones were not yet available the effect of switching from one to another would be similar to that of an immediate sharp contraction of the supply of money.

**Table 4. Central Bank of Argentina: Liabilities (in billions of pesos)**

	2001	2002	2003	2004
<b>Monetary base in peso</b>	26.0	29.4	46.4	52.5
<b>Currency</b>	24.0	19.0	30.3	37.6
<b>Current account in peso</b>	2.0	10.4	16.1	14.9
<b>Current accounts in other currencies</b>	12.8	1.0	3.8	8.0

Source: Argentine Central Bank

The advocates of Italexit have proposed various measures as temporary solutions to adopt immediately after the exit and before the entry into production of new notes. The most cited one is

<sup>8</sup> Bagnai (2012) p.16. In this way it is believed that the problems of switching to a new accounting system could be simplified.

<sup>9</sup> The data and information on the payment system provided in this document are drawn from a study on the Argentinian payment system carried out by the Centro de Estudios Monetarios Latinoamericanos (CEMLA) and the World Bank in 2000

<sup>10</sup> Since the adoption of the euro, the currency in circulation can no longer be accurately measured due to the free movement of people. The figure presented here is the conventional one, determined in proportion to the participation of each country in the ECB's capital, which in turn reflects the share of the population and its income

the stamping of the euro notes in circulation to distinguish them from the "real" ones, a solution apparently similar to that adopted at the time of the separation between the Czech and Slovak Republics. This, however, was a consensual separation with a clear advance notice. Those who propose it do not seem to be impressed by the size of the problem. In Italy at the end of 2016 there were approximately 3.6 billion banknotes in circulation (Bank of Italy 2017 b, p. 61). The ones still undistributed and those in circulation would have to be withdrawn as quickly as possible, in a situation in which many would either attempt to hide them or take them abroad. What logistics organization and what security system should be put in place to handle this operation? And how long would it take, considering that producing a new series of banknotes is a very complex process, given the standards and requirements that modern banknotes must comply with to minimize the risks of counterfeiting.

For small transactions an alternative would be to continue using the euro by limiting for instance withdrawals of notes from banks to a daily maximum of 100 euros (Bootle 2012 p.44). Some categories of payments such as those for parking, motorway tolls or drinks and snack vending machines would be facilitated. But the risk would be that small denomination notes would disappear from circulation as the public would store all the cash in euros they could get their hands on. Another possibility is that banks would issue mini-checks or other similar instruments but at a time when many banks would be at risk, this solution would certainly not be greatly appreciated.

In principle, the ideal solution would be electronic money. According to Stiglitz, with electronic money the exit could be smooth, provided there was cooperation with other European authorities (Stiglitz 2016). The adoption of a digital currency could make tax evasion much more difficult and would inflict a blow on the black economy and criminal activities. However, the use electronic money in Italy is still relatively limited. For example, in 2015, the number of yearly per capita payments was 44.5 compared to the European average of 108.6, ranking worst of all the European countries except Greece which had 14.1 per capita operations (Bank of Italy 2017b pp. 59 and 60). Particularly disadvantaged would be the weaker sectors of society including small businesses, micro-enterprises, many individual operators, and the South where cash is more widely used than in the North. The winners would be big distribution chains and online sales networks like Google and Amazon.

One of the few examples in history of a conversion of a currency without proper advance notice is the recent one in India. On November 8, 2016, the Indian Prime Minister Narendra Modi announced that the high-denomination notes would cease to be legal tender, forcing the population to replace them with newly-designed notes. The purpose was to contrast the informal economy and illegal activities. The operation, handled in a hurry and in great secret, generated enormous social discontent and caused a great deal of inconvenience and discomfort, which, according to press reports, caused many victims.<sup>11</sup>

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<sup>11</sup> According to the Indian Express of 18 November 2016 (1.38 pm) "at least 33 people have died as a result of demonetization, with causes of death ranging from people collapsing of exhaustion after waiting in the queues for the bank, a child dying in hospital as the parents only had old currency notes, others committing suicide as they were unable to feed their families." [http://indianexpress.com/article/india/india-news-india/demonetisation-suicides-heart-attacks-and-even-a-murder-among-33-deaths-since-decision-4378135/-](http://indianexpress.com/article/india/india-news-india/demonetisation-suicides-heart-attacks-and-even-a-murder-among-33-deaths-since-decision-4378135/)

**The main infrastructure for interbank payments could no longer be used.**

The creation of a new electronic system for interbank payments is a far more complex issue and much more serious from an economic point of view. It is however an issue completely ignored by the supporters of Italy's exit from the euro. Even the most thorough work on this issue, that by Bootle (2002), does not mention this problem while it extensively analyzes the various proposals concerning the creation of new notes. Stiglitz (2016) does not consider this issue either.

What is it about? Almost all payment transactions take place between customers of different banks, which have to use computer networks to exchange information and issue settlement orders regarding the various transactions. These networks are also needed to redistribute, among banks, the liquidity created by central banks. There are various types of interbank payment systems, those specialized in retail payments and those in large-value payments, including financial transactions.<sup>12</sup> The most important ones must meet high standards, to minimize the risk of operational malfunctions, the vulnerability to cyber attacks, and the financial risks that would materialize if one of the members were unable to provide the cash needed to settle the transaction. The system that has eventually become the international standard is the Real Time Gross Settlement Systems (RTGS). In this system, the financial risks are minimized because the credit and debit positions among members are immediately closed, thanks to the continuous intraday transfer of central bank money.<sup>13</sup> To ensure this function, the central bank provides intraday credit to system participants.

In Europe in the early 1990s each country had its own interbank large value payment system with its own rules and procedures. The result was much higher costs and longer processing times for cross-border payments than for national ones. In order to transfer funds between European countries it used to take an average of five days, which in some cases could even be a month, (Hormann 1991). The growth of international transactions resulting from the creation of the single market made this situation untenable. Compared with those of the other major currency areas, European companies not only had to manage liquidity and settle payments in a greater number of currencies, each with its own exchange rate risk, but they also had to rely on heterogeneous procedures that differed from country to country (Passacantando 1991, Van Petegem 1991). Consumers were forced to pay very high commissions to banks without any certainty about the time it would take to complete payments.

The effort to harmonize procedures and centralize payment infrastructures are parallel with the creation of the euro and culminated in the creation of the Trans-European Automated Real-Time Gross Settlement Express Transfer System (TARGET2), which is one of the most advanced systems operating in the world. To have an idea of the size of this infrastructure, one should

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<sup>12</sup> In the past there were clearing houses, physical locations where banks would exchange checks and other payment instruments. At the end of the day they adjusted the net balance of the various transactions by moving their accounts with the central banks. These systems, almost entirely electronic, continue to exist for small transactions, such as payments through checks and money transfers. High value transactions usually go through the RTGS systems. Retail payment clearing systems, however, use the RTGS system to settle the net balances on the accounts with the central bank.

<sup>13</sup> In traditional clearing systems, on the contrary credit and debit positions remain open throughout the day. At the end of the day net balances are adjusted.

consider that it processes payments of a value equivalent to the entire annual GDP of the euro area every six days (ECB 2017 p.6).

If Italy were to exit the euro it could no longer use TARGET2, which does not process currencies other than the euro.<sup>14</sup> Furthermore Italy would not be able to use any other similar system because the national one, BI-REL was discontinued almost ten years ago. This would mean blocking the bulk of a flow of payments that in 2016 amounted to 31,000 transactions per day, with a value of €72 billion per day (BI 2017b p.55). The central bank would be deprived of the primary channel through which the liquidity created is redistributed within the system.

### **While in Argentina there was already an RTGS system, in Italy it would need to be recreated.**

In Argentina there was a RTGS system, the Medio Electrónico de Pagos (MEP), which could process both US dollars and pesos, and be used for foreign payments. The system, owned and operated by the central bank, was generally considered very reliable. There was also a private electronic clearing system, called "Interbanking", linked to MEP (Cemla World Bank 1999). These systems played a crucial role during the crisis and especially after the convertibility regime was abandoned. "In the face of the financial crisis, the electronic clearing mechanisms have by and large held up and have helped to reduce the effect of the banking freeze. In fact transaction volumes, slowly growing before December 2001, have soared since" (Migliore 2003, p.25).

Creating a new interbank payment system in Italy would be extremely complex. In this respect it is worth recalling that it took five years to implement TARGET2.<sup>15</sup> It would of course take less for a single country system, but it would certainly not be a matter of a few weeks or even a few months, even for an institution like the Bank of Italy which has great expertise in this field or for potential external providers of such facilities.<sup>16</sup> Above all, as Codogno and Galli (2017) argue, it would be totally impossible, as well as inappropriate from the point of view of democratic fairness, to make preparations in secret. These activities involve a very wide range of internal and external stakeholders, including IT service providers who should be made aware of the project details to calibrate its technical specifications. Furthermore, the main features of the system should be approved by the user banks, who would need to be involved in its testing before it became operational. Finally, the project would also have to be extensively discussed and shared with the operators of the major international market infrastructures.

In the long phase devoted to the design and realization of the new system, access to deposits in euro and Italian residents' transactions in euros would have to be severely limited to prevent an outflow of deposits. This would imply controls on capital movements as well as limitations on withdrawal of deposits and on the use of credit cards. Operationally, it would be necessary to adopt manual procedures for processing large value interbank payments relying on bilateral relations between Italian and foreign banks, in a situation where the creditworthiness of the former would certainly be

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<sup>14</sup> Central banks of non-euro countries can access Target2 but only for settlement of their euro transactions.

<sup>15</sup> The decision was taken by the Governing Council of the ECB in October 2002 and the system entered into operation in November 2007.

<sup>16</sup> Along with the Bundesbank and the Banque de France, the Bank of Italy manages the Single Shared Platform (SSP) of the TARGET2 system.

questioned. Internet access to bank accounts for foreign operations and the negotiation of Italian securities would also have to be limited, something probably impossible to do for securities held overseas. A complex administrative apparatus would also need to be rebuilt (in Italy there was an entire institution devoted to these tasks, the Italian Exchange Office which has been dismantled a decade ago) with high costs. Given the high level of integration and sophistication achieved by financial infrastructures, the controls on the movements of capital would probably be ineffective and would give rise to various illegal activities. All of this would have major economic consequences, especially on investment. Consider, for example, the controls to prevent illegal export of capital through over-invoicing imports or under-invoicing exports, a limitation that would hit the most dynamic sectors of the Italian economy.

Throughout this period, Italy would lose direct access to the main international market infrastructures because the TARGET 2 system is the the main route to access these infrastructures.<sup>17</sup> A very important one is Target 2 Securities (T2S), implemented by the Eurosystem to settle securities' transactions which became operational two years ago and replaced the domestic Express2 system, which ceased to operate.<sup>18</sup>

For foreign exchange operations, the main global network is the Continuous Linked Settlement (CLS) system. It is the largest market infrastructure in the world and processes an equivalent of \$4.5 trillion transactions on average per day, more than twice those of TARGET 2.<sup>19</sup> The prerequisite for accessing CLS is that the country has an RTGS system, in addition to having a regime of substantial freedom of movement of capital. In Europe, CLS is directly linked to the TARGET2 system.

#### **4. Exit from the euro, public debt crisis and banking crisis.**

##### **Could a debt crisis be avoided?**

In Argentina, 90 percent of the debt was denominated in dollars. This made a direct causal relationship between devaluation and default inevitable. According to some, Italy could avoid defaulting on its debt because the government could repay the debt in the new currency and the central bank would have a free hand to increase the supply of the new currency and monetize the

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<sup>17</sup> Another important European electronic payment system is the Euro1 system that is managed by the European Banking Association, and currently accounts for about ten percent of the total volume of payments. Requirements for participating in the system include direct connection to TARGET2. <http://www.abe.org/EURO1-N=EURO1-L=EN.aspx> Other ancillary infrastructures linked to TARGET2-Banca d'Italia are those managed by Monte Titoli spa, Cassa Compensazione e Garanzie, e-MID and BI-Comp.

<sup>18</sup> As a temporary solution the country would probably be forced to use a foreign private facility for securities settlement as those managed by International Central Securities Depositories which settle in commercial bank money instead of central bank money. The bulk of the Italian Debt which market operators currently hold in the Italian Depository, Monte Titoli, would also have to be transferred abroad. This would imply higher risks and a marginalization of the Italian financial centre.

<sup>19</sup> It is supervised by the central banks of all the countries whose currencies are accepted by CLS, coordinated by the Fed.

debt. However, there are at least two reasons to believe that the creation of a new currency and its devaluation would lead to a default on the Italian debt.

The first is that it would be impossible to re-denominate some contracts in the new currency. The consequence would be that Government agencies and many private companies would have to pay interest and capital at maturity in euros, while their fiscal or commercial revenue would be predominantly in the new devalued domestic currency.<sup>20</sup> A recent study by Mediobanca argues that none of securities issued after 2013 could be redenominated because they are subject to Collective Action Clauses (CACs) to facilitate restructuring in the event of default. This thesis has been challenged by Codogno and Galli (2017) and by some jurists whom Zingales refers to in a recent article<sup>21</sup>. However, two aspects have to be considered:

- The uncertainty about what can be redenominated would give rise to numerous legal disputes with a highly uncertain outcome.<sup>22</sup> The biggest difficulties would be for private contracts, for which the possibility of being redenominated depends on the specific characteristics of each contract. Also in this respect, it is useful to look at Argentina's experience. The courts were flooded with depositors' appeals against banks (*amparos*) which resulted in bank losses of \$ 8.8 billion in local currency (IMF 2015 p.25).
- In any case, as argued by Codogno and Galli (2017), failure to adhere to the crucial contractual obligation, such as the payment in the currency in which the contract was concluded, would be considered by the rating agencies as a default event. It would also have huge reputation costs, making it difficult for the country to access international financial markets.<sup>23</sup>

The second and perhaps main reason is that for a country with a debt of around 133 percent of GDP, the fear of a departure from the euro, that would materialize if, for example, the political forces favoring this option were to win an election or also simply gain in the polls, could give rise to a vicious spiral. Something similar occurred in Italy in 2011 when the spread on ten-year bonds rose to nearly 3.5 percentage points and, as mentioned above, in Argentina, where in 2001 the spread over bonds in dollars rose in a few months by 32 percentage points. It is a well known mechanism in which rates increase because the debt is considered unsustainable, and the debt becomes unsustainable because rates increase. In these circumstances a default becomes inevitable. To reverse this spiral the European Central Bank put in place various programs such as the Securities Market Program in 2010 and the Outright Monetary Transactions program in 2012, whose announcement by Mario Draghi represented the turning point in the sovereign debt crisis. A country in the process of exiting the euro would obviously no longer be eligible for the OMT.

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<sup>20</sup> Consider for example, a company managing a concession to operate a freeway constructed with funding on the international market. After the exit from the euro, tolls would be denominated in the new currency while the debt service would continue to be in euros. The same applies to families who have contracted mortgages with international banks.

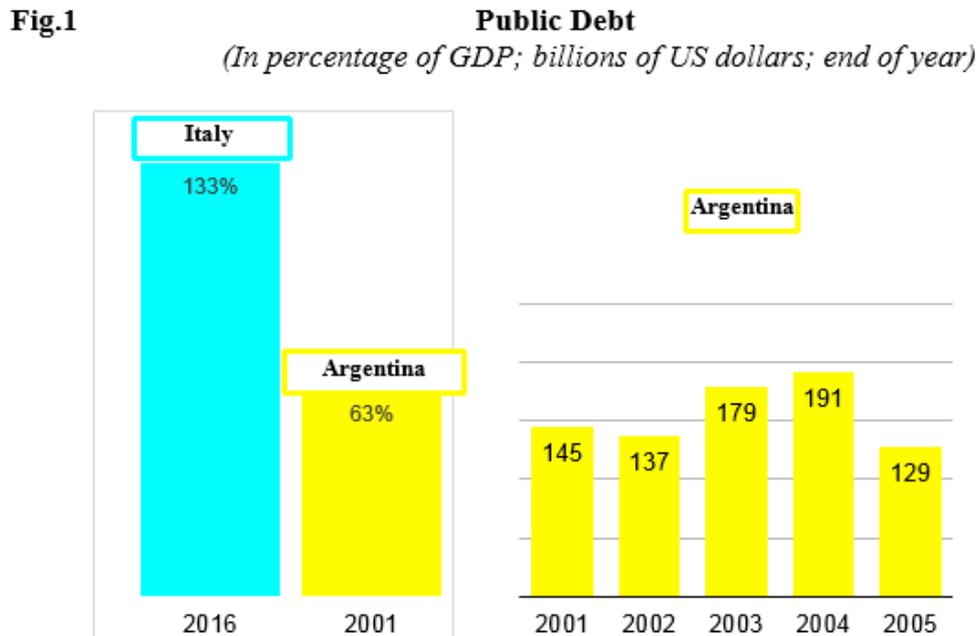
<sup>21</sup> Luigi Zingales "La lungimiranza dell'Europa e dell'euro", *il Sole 24 Ore*, 30 giugno 2017

<sup>22</sup> Codogno and Galli recall the enormous amount of litigation that followed the 1992 crisis, with plaintiffs claiming that banks were violating anti-usury laws. A similar topic is reported in the Zingales article mentioned above.

<sup>23</sup> The redenomination of bonds would not change the interest rate applied and for a fixed rate bond the yield could become negative as a result of the increase in inflation following a devaluation.

**In Argentina the debt was much lower than Italy's debt today and was held mainly by foreign residents.**

In Argentina, the public debt had grown considerably in 2001 but at the end of that year was still less than half that of Italy today, as a percentage of GDP (see Figure 1).<sup>24</sup> In addition, the share held by non-residents was 58.5, compared with 26.7 percent in Italy (Figure 2).<sup>25</sup>

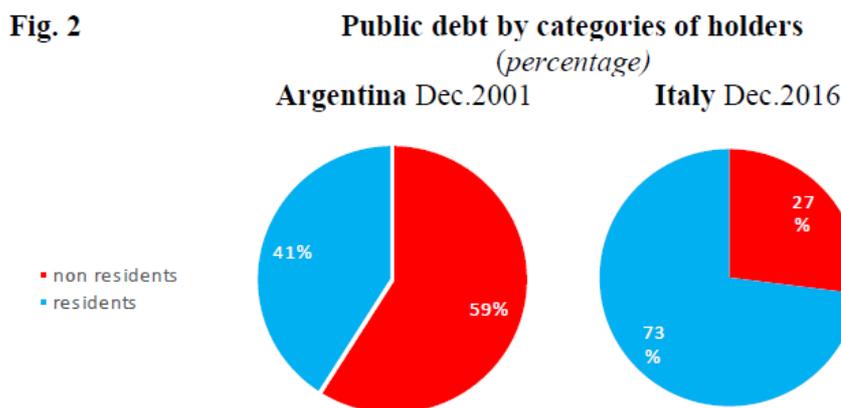


Source: for Argentina IMF, and Shapiro and Pham (2006) p.9. For Italy, the Bank of Italy

The Argentine government was very careful to continue honoring as much as possible the debt held by residents. As Table 5 shows, of 77.3 billion dollars of defaulted debt, 62 percent was due to residents, and the rest to international financial institutions enjoying the preferred creditor status. According to estimates of the government of Argentina, of the total debt that was restructured at the beginning of 2005 (81.2 billions), Argentine residents held only one-third, (about 27 billion). The restructuring of the Argentine debt held by non-residents completely closed Argentina's access to international financial markets and for more than 15 years exposed the country to pressures and blackmails by American judges, until the recent settlement of all outstanding obligation. However, by transferring the burden of restructuring mainly to the international community, the country has limited the impact on the wealth and income of residents.

<sup>24</sup> At the end of 2001 a first restructuring of the debt held by residents took place. This, together with the suspension of debt service reduced the debt in 2002. Since then the accumulation of arrears (about 40-45 billion dollars) and new debt raised with private creditors and bilateral donors raised the debt level again; it reached a maximum of 191.3 billions of dollars at the end of 2004, an increase of 32 per cent with respect to December 2001.

<sup>25</sup> The item "non-resident" does not include the securities held by the Eurosystem, with the exception of the Bank of Italy, and funds held abroad by Italians.



*Source.* For Argentina Ministry of Economy and Production, Argentine Republic, from Shapiro Pam (2006) p.9. For Italy, Bank of Italy (2017) p.176.

**Table 5. Argentina: Debt Restructuring by Investor Categories**  
(2001-2004; billions of US dollars)

<b>Debt Outside the Default</b>	<b>77.3</b>
Of which: International Financing Institutions	29.4
Residents (banks and depositors, public employees, provinces)	47.9
<b>Defaulted Debt not Restructured *</b>	<b>7.8</b>
<b>Debt Restructured</b>	<b>81.2</b>
Of which: Residents	26.8
<b>Past Due Interest</b>	<b>25</b>
<b>Total</b>	<b>191.3</b>

*Source:* elaboration from Shapiro Nham (2006) \*Paris club, bilateral donors, commercial banks

In Italy, the share of public debt held by residents is rising: last year it reached 61.1 per cent, up from 58.8 per cent the year before, mostly as a result of the growth of the component held by the Bank of Italy and insurance companies (see Table 6). This trend is common among the European countries most exposed to the crisis and is in part related to the quantitative easing program implemented by the European Central Bank since March 2015 (the so-called Public Sector Purchase Program). 80 percent of the purchases under this program were with non-domestic counterparts and 50 percent were with counterparts outside the euro area (ECB "Economic Bulletin" No. 3 2017 p.22). To bring debt back to a sustainable path, the default in Italy would therefore need be much more radical than Argentina's which was one of the most severe debt restructuring in history. The most affected category would be households, which now hold, 43 percent of the total debt, directly or through funds and insurance companies.

**Table. 6**                      **Italian Public Securities by Category of Holder**  
(percentages)

	2015	2016
Bank of Italy	9.2	14.5
Families	6.3	6.2
Italian Banks	18.7	17.8
Insurance companies	16.4	15.8
Other holders	8.2	6.8
Total Residents	58.8	61.1
Eurosystem and Assets of Italians held abroad	9.6	9.4
Foreign Investors	28.7	26.7

Source: Bank of Italy (2017) p. 176

### The effects on the banks of the devaluation and the debt crisis.

In, On the eve of the crisis, the Argentina banking system, was "one of the strongest in Latin America in terms of compliance with prudential rules and high capitalization" (IMF 2002 Article IV Consultation p.4). Since the early 1990s, the government had been active in reforming banking regulation and liberalizing the entry of foreign banks, which in 2000 accounted for almost 50 percent of the domestic market. The regulation was further strengthened after the so-called "Tequila crisis" in December 1994, when the devaluation of the Mexican *peso* had an impact, albeit briefly, on the Argentine banking system. The capital to asset ratio was raised to 11.5 percent, higher than the 8 percent ratio recommended by the Basel Committee. A capital requirement was also introduced for exposures to sovereign states, a very controversial measure that Germany and other Nordic countries would like to introduce in Europe and which is currently under discussion at the Basel Committee yet not applied in almost all countries.<sup>26</sup>

Nevertheless, all the protective safeguards that had been created were swept away by the events of 2001. An assessment of the state of the banks in 2002 is complicated by the fact that the Argentine banks suspended the publication of their financial statements for the whole year. However, it is clear that the Argentine banking system was severely hit by the outflow of deposits, currency mismatch, depreciation of its portfolio, losses on government debt, and the worsening of credit quality due to the high dollar exposure of their customers (IMF 2005).

In Italy, the banking system would inevitably be faced with a new crisis in a financial condition already severely weakened by the two crises of the last ten years. A deposit run would materialize at the very first sign of a possible euro exit (Bini Smaghi 2017). Banks would also suffer heavy losses due to a negative net foreign currency position of 130 billion euros, massive depreciation of

<sup>26</sup> BCRA (2000) p.7. The capital surcharge was set at a rate of between 1 and 5 percent, depending on the duration. A Trust Fund for Bank Recapitalization was also funded by a \$ 500 million World Bank loan to provide capital (in the form of subordinated or convertible loans) and liquidity to banks interested in acquiring distressed assets from other banks. Guidotti, Nicolini (2016) p. 13.

the securities portfolio, and further deterioration in credit quality.<sup>27</sup> This would have a strong impact on investment and exports, even if accompanied by a sharp devaluation, because the ability of a company to export depends crucially on the availability of credit.

## 5. Exchange rate depreciation and the new exchange rate regime.

The exchange rate of the currency would, as said, be set at 1 to 1 against the euro, but market pressures would soon change it. In Argentina, in December 2001, one dollar was bought with one *peso*. In June of that year the exchange rate was almost 4 (after three years it was 3, see Table 2). A common way to estimate the exchange rate depreciation is to look at the loss of competitiveness accumulated over the years. This is measured by considering various price indicators or by looking at the historical experience of countries with a net financial position or a current account balance similar to those of Italy. The most common forecast is for a depreciation of 30 percent after the *Italexit*, even though some estimate a smaller depreciation, or even a slight appreciation.<sup>28</sup>

Predicting future exchange rates is always a difficult exercise. It becomes an impossible one in the presence of a major structural change such as the exit of a currency from the euro. No traditional model would have any reliable predicting power in these circumstances. The market would struggle to give value to a little-known commodity, such as a newly-created currency that would be excluded for some time from major trading venues and multilateral settlement systems. This would be made worse for a currency issued by a country with a severe financial crisis and which most likely would default on its public debt. These uncertainties are much more radical than those traditionally considered in the most sophisticated exchange rate forecasting models.<sup>29</sup> The only forecast that should be made is that the value of the new currency for a few years would be totally unpredictable. And something unpredictable inevitably drives investors away.

Another aspect that is almost completely ignored is that of the exchange rate regime that would be adopted after the exit of Italy from the euro. Some have assumed a once-and-for-all realignment (Bagnai et al. 2017). It is however not clear how the market would accept a once-and-for-all realignment of a free floating exchange rate. Bootle mentions inflation targeting, as done in the United Kingdom after the 1992 crisis, but he admits that a central bank issuing a new currency

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<sup>27</sup> All the episodes of sharp devaluation have been associated with a worsening of credit quality. After the crisis in 1992, the ratio between bad debt and credit reached levels higher than the current one, cfr. Bank of Italy (2017) Fig.6

<sup>28</sup> Durant and Villemot (2016), using a "fundamental equilibrium exchange rate methodology", even estimate that the new currency would appreciate by 1 percent, thanks to the surplus on the current account of the balance of payments and a small negative net foreign financial position.

<sup>29</sup> Perhaps the most sophisticated econometric forecasts of the effects of Italy's exit from the euro are those made by Bagnai and others (2017). They perform various sensitivity analysis to take into account an overshooting of exchange rates, banking panic episodes and others extreme events. However, the size of these shocks and the analysis of their effects are quantified by considering past episodes of European crises or by referring to countries with a similar level of net financial assets to those of Italy. For the reasons outlined above, even the most serious European crisis in the past, such as those of 1992 or those of other countries, can not be compared to that of a country leaving the euro. Similar considerations apply to Allen (2017), which, however, forecast a debt default.

could hardly put its credibility at stake through a hard-to-achieve inflation target under a free floating exchange rate regime.

The value of the exchange rate depends on the system of international arrangements a country is part of, and can only be influenced by central banks with large foreign exchange reserves. It is not clear the type of international arrangements Italy would be part of after leaving the euro. It is also not clear what type of support to the exchange rate could be provided by a central bank whose bond portfolio would be greatly devalued by the debt restructuring and whose reserves, as shown in Table 7, would be much lower than its net foreign liabilities due to the growth of Target balances.<sup>30</sup>

Stiglitz (2016) proposes a friendly divorce and the introduction of a "flexible euro" with individual countries, or groups of countries, which would create their own electronic money and agree on reciprocal support mechanisms aimed at maintaining the exchange rates within a band. However, it is difficult to imagine a friendly path to this setup, given the diverging credit and debit positions of the countries in the euro area (the Bundesbank in June had a claim on the ECB of 861 billion and the Bank of Italy a debt of 414 billion). Furthermore, countries would not be attracted by the prospect of a return to a system of currency bands that has already been experienced in Europe and has been irrevocably abandoned after the 1992 and 1993 crises.

There are only two possible regimes. One would be a freely floating exchange rate, without any central bank intervention. However, this would expose the new currency to the most unpredictable speculative pressures. The alternative would be an exchange rate system protected by rigidly administered controls on capital movements. This would clearly be a self-defeating option for a country highly integrated with the international economy like Italy.

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<sup>30</sup> TARGET balances are the net credit and debit positions of national central banks with respect to the ECB, originating from TARGET2 cross border transactions. The negative (positive) balance represents a debt (credit) of the single central bank vis-à-vis the ECB. As Mario Draghi, President of the ECB, clarified in a letter to some Italian members of the European Parliament ([https://www.ecb.europa.eu/pub/pdf/other/170120letter\\_valli\\_zanni\\_1.en.pdf?be6aea5c0aa3596d1d08149b510ea707](https://www.ecb.europa.eu/pub/pdf/other/170120letter_valli_zanni_1.en.pdf?be6aea5c0aa3596d1d08149b510ea707)) the TARGET balance is a debt to be repaid in the case of an exit from the euro. In recent years, the Bank of Italy's debit balance on TARGET2 has increased as a result of the reduction of net foreign debt of Italian banks and the reallocation of the residents' portfolio towards activities other than Italian government bonds and bank bonds. The impact of these factors was only partially offset by an increase in the current account surplus. (see box "the Trend in the Bank of Italy's Balance in Target2" in Chapter 10 of the 2016 Annual Report).

**Table. 7 Bank of Italy: Foreign Assets and Liabilities**  
(billions of euros at year-end)

	2015	2016
Foreign Assets (A)	221.1	237.3
Of which: Reserves	120.1	129.1
Of which: Gold	76.9	86.6
Foreign Liabilities (B)	257.5	367.8
Net Foreign Position (A – B)	-36.4	-130.5
Bonds in euro in portfolio	207.7	327.4

Source: Bank of Italy (2017) p. 176

## 6. The creation of “parallel currencies”.

A possible "third way" between maintaining the euro and creating greater flexibility for individual member states would be to issue a “parallel currency”. This idea has been flagged by Marine Le Pen in France and Silvio Berlusconi in Italy, although the details of these proposals are not known and probably do not exist.<sup>31</sup> According to the proponents, the introduction of such a currency would give a strong boost to growth, alleviating the austerity conditions imposed by Europe on the debtor countries. The program of the Five Star Movement in Italy includes the introduction of the fiscal currency (Codogno and Galli 2017). This would be a security issued by the State with a maturity of, say, two years which could be redeemable for future tax payments or other obligations vis-à-vis the public sector. Given this property, it would be accepted as a means of payment.

According to Bossone and Cattaneo (2017), issuing these certificates, called Tax Credit Certificates (TCCs), would be legally possible because each Member State is autonomous in deciding the structure of its debt as well as in the introduction of provisions to dilute tax obligations.<sup>32</sup> A massive distribution to the public of these securities could give a strong boost to domestic demand.<sup>33</sup> Moreover, the rise in public spending would increase the government deficit and the debt, but this effect would be offset by the higher tax revenue generated by higher income growth. There is a study by Mediobanca (2014), according to which, in Italy, a TCC emission of 20 billion in 2016 would have led to GDP growth of 3 percent in that year. The expansionary effect would be the result of the increase in business and household spending power, with positive effects on consumption and investment. What can the experience of Argentina teach in this respect?

### The effects of “quasi monies” on growth in Argentina.

In Argentina, parallel currencies (or "quasi monies" as they were denominated by the IMF) were introduced for similar reasons. 15 provinces, out of a total of 23, issued them to relieve the

<sup>31</sup> See <https://ftalphaville.ft.com/2017/08/21/2192571/parallel-currency-talk-gains-ground-in-italy/>

<sup>32</sup> However, rating agencies are usually concerned about a lowering of the maturity of the debt.

<sup>33</sup> Cotogno and Galli (2017b), show why issuing these certificate would imply an increase in public debt.

constraints of the federal government's budget in order to pay salaries and other expenses (Arguero 2013 p. 32). The first initiative was that of the province of Buenos Aires which issued the famous *patacones*, bearer notes payable at a future date in the Argentine currency. The federal government also introduced its own instrument, similar to the fiscal money instrument being proposed today in Italy, in order to create a level playing field among provincial budget allocations. It was a small federal bond called Lecop (Letras de Cancelación de Bondes Provinciales), which could be redeemed for federal tax payments. At their peak the “quasi monies” reached almost 50 percent of the total currency in peso in circulation (IMF 2003 p.34). At the end of 2001, it was common for Argentinian workers to receive their wages in two or three different currencies. "In Argentina, not only did the recourse to printing quasi-monies relax the cash flow constraints faced by the public sector, but it also worked as an adjustment mechanism for the private sector, which rapidly embraced the new “bills” as an instrument for reducing labor costs and thus for circumventing labor market rigidities” (de la Torre et al 2003, pp.89-90).

What about the impact on growth? The assessment of the effect of regional currencies on employment and income in the provinces that had issued them is not an easy exercise because following the exit from the currency board, the monetary base in national currency grew rapidly. The original purpose of boosting economic activity by paying public wages with “quasi monies” was diluted by massive “official” money creation. However, one of the few detailed studies on the subject makes an interesting comparison between the income and employment trends of the provinces that issued parallel currencies and those of other provinces. According to this study, "Provinces that issued currencies did not experience a surge either in total employment or in specific sectors. Moreover, similar provinces show similar performances or show that the provinces that issued their own currency have higher rates of destruction of private jobs” (Argüero Luis Ignacio 2013 p. 29).

The reason for this, according to the author, is that the parallel currencies heightened the uncertainty about the economic and financial outlook of the provinces that issued them and doubts about the willingness of the central government to defend the currency regime. The greater uncertainty had an adverse effect on the propensity to invest and to launch recruitment programs notwithstanding some increase in consumption. As already mentioned, when, at the end of 2001, President Rodriguez Saa announced the initiative to create a parallel currency at national level the effect on expectations was disastrous because it was interpreted as the prelude to the breakdown of the currency regime, which in fact did occur a few days later.

### **A European "Bi-Monetary" Union?**

In principle these adverse signaling effects could be alleviated if “quasi monies” were promoted by a coalition of “similar thinking” countries in the euro area, or at least tolerated at the European level. The Monetary Union would then become a sort of bi-monetary system, reminiscent of the bimetallic systems of the past. As history shows, however, bimetallic systems have always been intrinsically unstable due to the well-known Gresham’s law, according to which, in an economic system in which two monies circulate simultaneously, the one with less intrinsic value tends to exclude the one with higher value. Internationally, such systems have failed because each nation tended to act autonomously in setting the exchange rate between the two monies, which therefore

varied from country to country. A similar problem occurred with the "quasi-monies" in Argentina. They obviously had no intrinsic value but their purchasing power varied from province to province because each province issued them at different rates. As shown in Table 8, the exchange rates with the Argentine peso varied from a maximum of 100 percent to a minimum of 42 percent and had a value of 95 percent for the two most common "quasi-monies". In addition, according to the IMF, with the exception of *patacones*, these monies were not accepted for payment in other provinces.

Seen from another perspective, the problem posed by parallel currencies is that they undermine the capacity of the central bank to conduct a coherent monetary policy at national level because they erode or make the demand for official money unpredictable. In the euro area today the decisions regarding the official rate and the degree of accommodation of monetary policy necessarily take into account the average conditions of the area.<sup>34</sup> If each country had a double currency circulation, what criteria would be adopted to establish the official reference interest rate and the quantity of money to be created? What information value would the reference rate have? For example, how would the current discussion on "tapering" unfold if some countries could have the safety valve of an additional local currency issuance? Would the double currency system facilitate the convergence of opinions in the decision-making process or would it make this process unmanageable? And how would this benefit countries like Italy that are probably not in favor of an early termination of the current policies of quantitative easing?

Another issue is the impact of a double currency regime on budgetary policies. Since a parallel or fiscal currency is debt, what it is necessary to ask is who will eventually pay for its rescue. The evidence from Argentina is that the issue of quasi monies that could be converted in pesos ended up boosting the federal debt. When the government decided to withdraw these monies from circulation in 2003, it launched a special issue of government bonds, the BOGAR, which increased the national debt. Within a year the quasi monies disappeared from circulation.

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<sup>34</sup> Possible tensions in local markets, such as real estate prices, can in principle be managed through the use of macro-prudential instruments whose management is delegated to individual states.

**Table. 8**      **Argentina: Exchange Rates of some Quasi Monies in Circulation***(November 2002)*

Issuer	\$ ARG mln	Exchange Rate (in percentage)
Lecops (federal)	3159	95
Buenos Aires	2583	95
Cordoba	800	90
Corrientos	206	42
Entre Rios	219	53
Formosa	73	70
Mendoza	59	95
La Rioja	15	100
San Luis	30	100

Source: IMF (2003)

## 7. Conclusion.

Politicians who propose an exit from the euro do not appear to be interested in providing details about the programs they have in mind. This is what happened with Brexit, when it was not explained to the voters what that choice would mean in practice.<sup>35</sup> And yet exiting the euro has a very important technical dimension, in addition to an economic and political one. Citizens should be made aware of all these dimensions and their potential impact. This paper, through a comparison with the Argentine experience, has examined some of these technical aspects.

Perhaps the most complex aspects are the creation of the new currency and a new payment system.. The creation of the euro was accompanied and in part preceded by the creation of a uniform system of rules and procedures for making payments and regulating financial transactions in Europe. The result has been a substantial reduction in transaction costs for households and businesses that has benefited the competitiveness of Europe compared with other major currency areas. However, it involved the elimination of national systems and their gradual replacement with centralized infrastructure at the European level. In the euro area, the main achievement was the creation of the TARGET2 system that constitutes the main channel of monetary circulation. While similar systems in Argentina processed both pesos and dollars, TARGET2 in Europe cannot be used for currencies other than the euro. For Italy, not being able to use it would mean blocking a flow of payments that in 2016 totaled 72 billion euros per day on average. It would be like a “monetary heart attack”, without the possibility of a bypass to an alternative circuit, at least for the most important payment categories. For the country it would be extremely complicated and costly to carry out transactions

<sup>35</sup> A recent booklet on exiting the euro by political supporters of the return to monetary sovereignty named “Beyond the Euro to become great again” only states that “The actions necessary to change the currency while minimizing the damage are not simple, but a Government determined to act has all the instruments to do it, and all the steps are known, including the legislative ones”(author’s translation) cfr Borghi (2017)

with the rest of Europe and preserve smooth access to international financial and foreign exchange markets which are crucial for a high-debt economy dependent on exports. Italy would be confined to a second-tier role in international markets for a period of time that would go far beyond that of the transition to a new currency.

The few analyses of Italexit's operational aspects almost completely ignore this problem and focus only on how to create new banknotes or their substitute, often in a very simplistic way. The replacement of the 3.6 billion euro banknotes in circulation would face very complex logistical difficulties and the solutions envisaged by Italexit's advocates, such as stamping the notes or the adoption of electronic money, are not easily accessible and would take a long time to implement. The total value of the euro currency in circulation is 181 billion, or approximately 11 percent of GDP. Failure to replace it quickly with a new currency would seriously affect consumption. The most vulnerable sectors of society, namely small businesses, micro-enterprises, and many individual operators, would be greatly affected.

The creation of a new currency, and above all a new payment system, would require lengthy preparations. It would certainly not be a matter of a few weeks or even a few months. And the idea that all this can be done in secret is absurd. It is a project whose goals should be shared with a large number of stakeholders, including consultants, IT technology vendors, external providers, banks and other users of the system, and which should eventually be discussed with other major international providers of market infrastructures. In order to prevent rumors of Italexit from causing massive outflows of money, rigid controls on capital movements and limits on the public's access to bank accounts would have to be maintained for a prolonged period of time. Few measures have such a disruptive effect on a country's economy and society as controls of this type. In Argentina, far less radical measures with a more temporary nature than that required for a country exiting the euro caused massive social disorder with many victims and a tumultuous political crisis that caused the resignation of four Presidents in just three weeks.

The transition to the new currency and the financial disruption accompanying it would almost inevitably lead to a public debt default. In Italy, debt restructuring would likely be far more radical than the already extreme one that took place in Argentina, where the public debt was less than half of that of Italy, as a percentage of GDP, and almost 60 percent held by non-residents. Moreover, the Argentine government managed to exclude from the restructuring a large part of the debt held by the residents. In Italy the share held by non-residents is around 30 percent and continues to decline as foreign investors are reducing their exposures in crisis-hit European countries, by taking advantage of the Eurosystem's Public sector Purchase Program (PSPP). Debt restructuring would directly affect households' wealth and put into crisis a financial system that has already been severely hit by the twin crises of recent years. Not to mention the serious backlash on the country's productivity and export capacity.

Exiting the euro and debt default would also have serious consequences for the Bank of Italy, whose debt *vis-a-vis* the ECB is higher than its reserves and which would suffer massive losses on its securities portfolio. A weak central bank would not be in a position to defend the exchange rate of the new currency, which would then end up being exposed to the most unpredictable speculative pressures.

The Argentine experience also shows why the introduction of a parallel currency would not be a solution. Initially, “quasi monies” had mostly a limited and local impact, if any, on the economies of the provinces that issued them. When the central government proposed a third currency at the national level, it was like pouring gasoline on a fire. In Italy, the creation of a parallel currency or “fiscal money” would be interpreted as the first step towards a euro exit, especially if carried forward by a government made up of political forces clearly hostile to the euro. It would also be severely judged by rating agencies. In principle, these dangers could be alleviated if the proposal was brought forward at the European level by a hypothetical alliance in favor of a “bi-monetary” union. The need to adapt uniform monetary and fiscal rules to the realities of individual countries is legitimate, but the instrument to meet this need cannot be a dual circulation system. The history of bimetallism teaches us that these systems are by their very nature unstable and Argentina's recent experience clearly confirms this.

The hope is that these considerations and others formulated in the recent debate will ultimately convince the political forces of the absolute impracticability of exiting the euro, and of the dangers of what appears to be a compromise solution such as the creation of parallel currencies. The probability that these initiatives will ultimately have disastrous consequences for the country's economy is very high. And it is also very high the risk that such a leap in the dark will turn out to be a suicide for whatever political force that proposes it.

The discussion of these proposals is a distraction from the debate on the choices that Italy will have to make to consolidate its recovery and reduce the public debt. Above all, the risk for Italy is of being cut off from the important debate on the reform of Europe's governance and its crisis management tools, at a time when opinions are beginning to converge on the need to reform the current, totally inadequate, European institutional set-up.

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