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A PLAN FOR DOLLARIZING ARGENTINA

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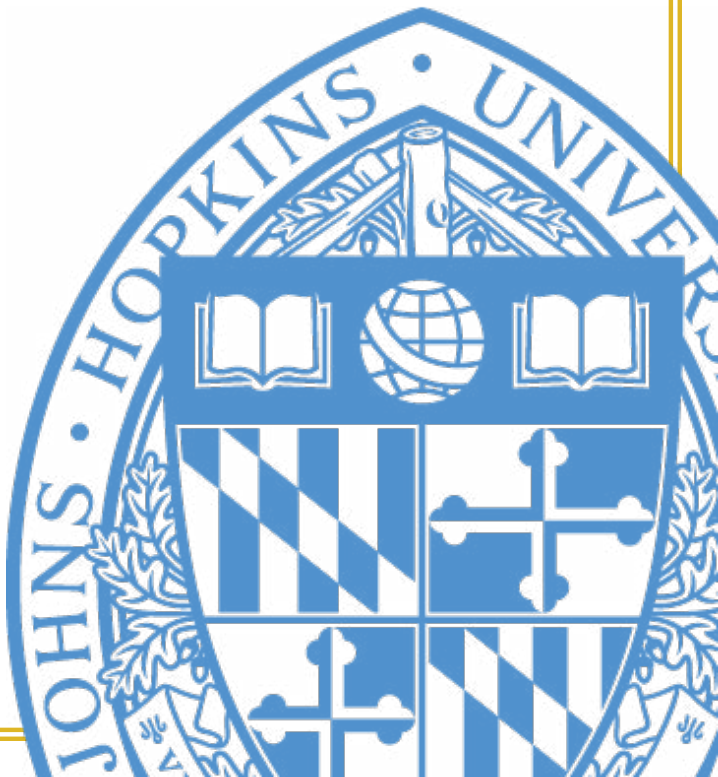

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A Plan for Dollarizing Argentina

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About the Series

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Abstract

For many reasons, dollarization is an efficient and realistic option for this country. Yet, in order to last, it must be able to withstand banking panics without the assistance of a conventional lender of last resort and the lobby of protected industries to revoke dollarization. To this end, we advance a model of commercial banking close to that of Panama, under foreign law, and argue for free trade agreements with superpowers to smooth out real-exchange rate fluctuations.

Keywords: country risk, zero-trust country, currency substitution, irreversible reforms, Panama, branch banking.

JEL codes: E02, E42

1. Introduction

The history of Argentina's monetary and macroeconomic instability is long and known by all; its efficiency cost defies imagination (Ávila 2011). Instability was high in 1975 (fiscal and balance-of-payments crisis), higher in 1989/90 (hyperinflation), and even higher in 2001/02 (banking panic and debt default). The sharp run from Central Bank peso notes towards the dollar in 2018 is a piece of evidence that Argentina keeps being a de-facto dollarized country.

In the 70s anti-inflationary policies hinged on fixing the foreign-exchange rate through administrative decisions taken by the Minister of Finance. In the face of growing loss of credibility, in the 80s anti-inflationary policies started to demand explicit backing of the President of the Nation. In the 90s Convertibility required passing a law by Congress. Nowadays a credible peso fixing would require dollarizing the country. Dollarization is defined as the unilateral substitution of reserve money (US dollar, Euro) for the national currency.

This is an odd country. On the one hand, it works under a currency substitution system;[1] on the other, its economy is ruled by the country-risk premium. Its Central Bank cannot issue reserve money and its Government cannot issue bonds AAA. So it does not have the necessary tools to carry counter-cyclical fiscal and monetary policies out. Argentina lacks credit in the broadest sense; it is a zero-trust country.

Dollarization has become a real alternative because it is basically irreversible, because the cost of seigniorage is only a fraction of the benefit the country forgoes by keeping the peso, because an independent monetary policy does not have influence upon the real exchange rate and the business cycle, and because the inflation tax has been for a long time the basic source of financing of an expansive fiscal policy.

A lasting dollarization should rest on two reforms: a) a new commercial banking system because from experience we think a dollarized Argentina would not support a six-month bank run; b) free trade agreements with superpowers because from

[1] For us a system of currency substitution is the same as a dollarized system or a bimonetary system (peso/dollar). For the sake of simplicity, we will refer to the Argentine system as a bimonetary one from now on.

experience we think a dollarized Argentina would not last ten years the complaints for losses of competitiveness coming from the protected industry.

Section 2 introduces a plan for a lasting dollarization, which comprises four stages: conversion, dollarization, commercial banking reform, and trade liberalization anchored in free-trade agreements with superpowers. We emphasize at every step the need of irrevocable monetary, banking, and commercial arrangements. Section 3 attempts to answer various questions and criticisms to the plan. Section 4 focuses on the design of a model of commercial banking strong enough to keep the value of deposits safe. And Section 5 summarizes the main remarks.

2. The Plan

Back in 1960 former finance minister Federico Pinedo published a little book evaluating the performance of the Argentine economy in the preceding 150 years. Among other remarks, he stressed the fact that the country had been especially prone to fiscal deficits and inflation. After adding the fiscal and monetary chaos of the following six decades to the picture, it is easy to realize that Pinedo had not seen anything yet.

The very existence of a central bank leads to devaluation of the currency and inflation. It's hard to reject this statement born of Argentine own economic history. Instead of new attempts to make the peso come back to life, we should do otherwise: substitute a World class currency for the peso. This amounts to dollarizing the economy through the unilateral adoption of the US dollar or the euro as this country's legal currency.

Dollarization so defined has benefits and problems. The former are huge and the latter, important. Among the problems, it's usually said, dollarization carries political costs so great that efforts to that end are hopeless. I don't know. People in Ecuador, El Salvador and Panama do not think so. Not either in Scotland, where they discuss the possibility of staying with the EU and keeping the pound sterling while the UK leaves the Union. This would also be another example of dollarization.

Thanks to a first class currency Argentina would enjoy these benefits: no more currency devaluations or inflation; no more traumatic hot-money inflows or outflows; no more recurrent wage bargaining or labor strikes; no more power-tariff hikes or blackouts; no more price freezes or threats of expropriation, and no more embargoes on exports or imports. Although it's hard to believe, each of these shocking events has to some extent a monetary cause. So big and ignored are the damages that a poor quality currency like the peso can inflict on the national economy.

A lasting dollarization process covers from the short to the long run. We identify four main stages.

First stage: Conversion of monetary and non-monetary liabilities of the Central Bank. The former are the monetary base and the latter, the interest-bearing peso notes issued by the Central Bank. The conversion exchange rate equals the quotient of liabilities and international reserves. Investors make this calculation daily since the early 1980s. The conversion exchange rate would be lower if a) excluding part of the stock of peso notes was not risky for monetary stability, or b) increasing the stock of international reserves without compromising the public-debt service was possible. With full conversion of the Central Bank's monetary and non-monetary liabilities, the peso short-run interest rate would fall to the level of the three-month American-bond rate, plus the expected rate of devaluation of the peso with respect to the dollar, the Central Bank may choose not to roll over its non-monetary liabilities, and no foreign-exchange crisis should occur. Thus the inflation rate would start to decline till vanishing in three-year time more or less.

Second stage: But in order to build the Argentine economy edifice we need a fixed price of the dollar for the indefinite future. Two conditions: fixed price and indefinite future. Conversion provides a fixed price. But since the demise of Convertibility Law in 2002 this regime lacks the essential credibility to provide time perspective. The answer is dollarization due its irreversibility. We talk about irreversibility in probabilistic terms since the likelihood of de-dollarization is quite low. Expected devaluation would then vanish and the short-run peso interest rate would fall to the level of the three-month American-bond interest rate.

Passing from Conversion to Dollarization should take no more than six months since the latter gives a time horizon to the former. In this time span Government would convert banking deposits and Central Bank notes into dollars at the Conversion exchange rate, and offer the public the conversion of their currency holdings at the same exchange rate, while proceeding to import the needed quantities of coins and small-denomination bills.

Third stage: An ordinary dollarization is a ticket to a banking panic. There exists certain relationship between a fixed exchange policy (of which dollarization is an extreme type) and banking panics since dollarization leaves commercial banking without a last resort lender. This is the first problem we have to solve in order to get a durable dollarization. Without solving it, the interest rate on the ten-year dollar denominated Argentine bond would not fall and the dollarization attempt would be a failure. Be aware of the fact that this rate governs spending in the national jurisdiction (Ávila 2010).

The Federal Reserve System is not the last resort lender in Ecuador, El Salvador, and Panama. To solve the problem the first two countries established high reserve ratios on deposits and asked commercial banks to create liquidity funds; so far, they have been successful. The task of the Central Banks in these countries is a modest one; it consists of coordinating and supervising the activities of commercial banks. If Scotland decided to maintain the pound sterling without a previous agreement with the Bank of England, it would follow the same path. In turn, Panama put in practice in 1970 a banking model highly integrated with international capital markets. It works successfully under national law, without reserve requirements or liquidity funds. But in view of the long history of contractual violations and institutional reversion, such solutions do not seem appropriate for a country like Argentina. In the middle of a financial crisis, the probability that the government of this country arbitrarily puts bonds on bank reserves and liquidity funds, or repudiate national law, is really high.

There are other ways to make up for the last resort lender. Let's consider two of them. The Simons proposal: consists of dividing commercial banks in two parts; a monetary store that takes in current account deposits under 100% reserve ratio and offers

liquidity services, and an investment bank that, instead of taking in time deposits, issues security shares and invests in assets the value of which fluctuates in the Stock Exchange. In this fashion the proposal eliminates the perverse asymmetry affecting the nominal values of assets and liabilities of traditional banking, and affords a stable system without the help of a lender of last resort. This is not however a wise solution. Since the monetary store would work under Argentine jurisdiction the probability that Government put forcefully a bond on its reserves is really high (Ávila 2004).

The next proposal is risk-free. There's no chance that Government arbitrarily puts bonds on banks reserves and there's no chance that a banking panic could happen. Think of an internationalized system of commercial banks. Resident banks would continue to offer traditional capital-market services though they will not receive deposits or give loans on their own but on account of prestigious foreign banks. Deposits and loans would remain under the jurisdiction of the Central Banks to which the foreign banks report. So those central banks would become lenders of last resort of resident commercial banking under foreign law. Since the cost of repudiating of an arrangement under foreign law is bigger than that of repudiating an arrangement under national law, this banking organization would have a better chance to live on and help to lower country risk (Ávila 2004).

This problem demands decisive action. The second and third stages should be treated as one.

Fourth stage: We have to face a couple of additional problems in order to build a lasting dollarization. The first one relates to likely difficulties to place new sovereign debt, and the second to claims for so called losses of competitiveness.

For a country without an issuing bank it might be more difficult to place sovereign debt. The bond holder may feel more exposed to default risks and ask for higher yields when he knows Government cannot print money. There are a couple of tools to address this situation: a) external contingent credit; b) fiscal surplus. To the best of our knowledge, there is not a good solution for this problem because there is not an arrangement with low probability of reversal.

If the absence of a lender of last resort can be fatal in the short run, the claims for losses of competitiveness of the protected industry can be corrosive in the long run. A durable dollarization will lower significantly the long-run interest rate and bring abundant credit while the country gets more expensive. We have two powerful tools to counteract this phenomenon: a) open up the economy, that is to say raise exports and imports as a fraction of GDP; b) reduce the size of Government, that is to say lower public spending as a fraction of GDP.

We think there is no way to effectively open the economy up without turning to free-trade agreements with superpowers. Trade liberalization generates a new relative-price structure. In particular, it raises the price of export goods thus fostering a reallocation of capital, labor and entrepreneurial capacity from the protected sector to the unprotected one, and meanwhile creates an attractive environment for foreign direct investment. But if entrepreneurs and investors perceived the new price structure as temporary, the economy would get bogged down in the mud. Because of the expected policy reversal, protected industry stagnates, unemployment rises, investment is delayed, and exports languish. Signing free-trade agreements with superpowers is an efficient escape from this situation due to their low probability of repudiation. If the trade liberalization policy could not be anchored in this manner, the best thing is not to open the economy at all. In view of the high probability that the Argentine government will be the first to request an exception to the rule, the economy would get bogged down and the agreements would fall in public disrepute (Ávila 2015 chap. II).

Let us explain how the forces unleashed by the opening up lead to a cheapening of the country, a so called competitive gain. As we know, the capital-account balance must be equal to the current-account balance with opposite sign. Assume no net capital inflows so that the current-account balance is zero. The opening up takes place. Thus the price of imported goods goes down while import spending goes up. But the current-account balance must always be zero. So exports grow proportionally. Exports grow because the price of services (non-traded goods) goes down. That is to say the country gets

cheaper. This phenomenon makes stronger the rise of the relative price of exportable production aforementioned.

Reducing the size of Government makes cheaper the country in a direct way. Given that public spending is composed mainly of wages (teachers, policemen) and public works, its reduction implies a contracted demand for services in general, and an additional cheapening. Labor deregulation, infrastructure investment and removing distorting taxes are important reforms. But when public spending increases too much and the economy is rather closed to international trade their influence become nil.

As investors check progress in the third and four stages, the Argentine risk premium will move downwards to the Chilean risk premium. A steady process of direct foreign investment, export expansion, and economic growth will follow the reduction of Argentine risk. Concrete outcomes will take time, no less than three or four presidential terms.

The first stage has no purpose without the second. The second stage without the third is dangerous. And the third stage without the fourth is naïve, and ill-fated for the ideal of a fully integrated country to World trade and capital markets.

This is our economic argument for dollarizing Argentina. Now politicians should weigh pros and cons.

3. The ABC of Lasting Dollarization

The purpose of this section is to answer or comment various questions and criticisms to our Plan. Some passages repeat arguments developed before for the benefit of clarity.

1. What do we mean by dollarization?

It's the unilateral adoption of a reserve currency. In practice, only two currencies enter this category: the US dollar and the euro.

2. Are there many dollarized countries?

There are many de-facto dollarized countries. Think of countries whose dollar-monetary assets represent a large fraction of total monetary assets. In 2000, after a long decade of monetary stability, Argentina ranked 4th in a list of dollarized countries, below Bolivia, Nicaragua, and Russia (Ávila 2004). Nevertheless, when talking about dollarization we usually think of de-jure, full or official dollarization. There were 35 officially dollarized countries in 2002. Ecuador, Panama, and El Salvador stand out when measured in terms of GDP. Ecuador's GDP represents 20% of the Argentine GDP; Panama's 10%, and El Salvador's 5%.[2] Kosovo's and Montenegro's GDP are smaller, and they opted for the euro. The remaining countries are micro-states (Hanke 2002, Jácome and Lönnberg 2009).

3. What reasons led them to be dollarized?

Panama got dollarized due to a historical accident. El Salvador, to lower interest rates, spur foreign direct investment and also because it was the next logical step in its program of economic reform. After leaving old Yugoslavia, Kosovo and Montenegro adopted the German mark because it was a better currency than the dinar, and as soon as Germany substituted the euro for the German mark they did the same. Finally, Ecuador got dollarized due to a banking crisis and after a bout of high inflation (almost 100% per year). None of these countries needed a megacrisis like those affecting Argentina since the Rodrigazo, in 1975, to be dollarized.

4. Why should Argentina be dollarized?

Because Argentina has attempted unsuccessfully to survive with de-facto dollarization for the last 35 years. The volatility of velocity of circulation is a salient feature of a de-facto dollarized, bimonetary economy. This means that portfolio changes from national money to reserve money, whatever the motive, could be sudden, frequent, and massive, implying a well-known row of maxi-devaluations, inflation hikes, capital outflows, and recession (Ávila 2004). For this reason we claim that a policy of floating-exchange rate is a dangerous thing for this country.

[2] Own estimates based on International Financial Statistics 2016.

To deal with a bimonetary economy the exchange rate must be fixed. Convertibility did so. Yet this regime has a flaw: it can be revoked without paying a significant cost. Conversely, dollarization faces a high cost of repudiation which makes dedollarization unlikely. There are no examples of reversals of official dollarizations. Liberia, at the end of WWII, might be an exception but we lack enough information to make sure.

5. Which are the benefits of dollarization?

The benefits are the misfortunes the country will avoid: foreign-exchange runs, inflation and hot-money flows; recurrent wage bargaining and strikes, power-tariff hikes and blackouts, price freezes and expropriation threats, export and import embargoes. To some extent, all this damage is the consequence of a low quality currency.

Another benefit is the instantaneous fall of the short-run interest rate (3 to 6 months). The fall of the long-run interest rate is another story. This one depends on the country risk premium, which, in turn, depends on issues like the fiscal deficit, the ratio of public debt to exports, the stability of the banking system, and the degree of trade openness. In other words, the fall of the long-term interest rate depends on important reforms in the fields of public finance, banking and international trade that would finish up official dollarization.

6. Two additional benefits.

Dollarization would soften financial stress. Notice that the Argentine Treasury's bill for debt interests jumped from 2.3% of GDP to 4% last year as a result of a big devaluation. Dollarization would contribute to financial stability.

Since the dollar circulating in the cities of Rosario and Mar del Plata would be the same as the dollar circulating in New York and San Francisco, the new currency will not be subject to devaluation. Therefore we would not experience sudden hikes in food prices and jumps of the level of poverty. Dollarization would contribute to political stability.

7. Dollarization deprives Argentina of seigniorage revenue.

Not a strong argument. What is the opportunity cost of seigniorage revenue? To retain this revenue we should continue to deal with the peso, which has proven to be, once and again, a poor currency. The forgone benefits of not dollarizing are the opportunity cost of the peso. We find it hard to believe that the opportunity cost of the peso is smaller than seigniorage revenue in an economy marked by stagnation and demonetization since the 1970s.

8. Dollarization lacks a last resort lender.

In the previous section we reviewed the solution that Ecuador and El Salvador found to deal with this problem. We said that that solution is not advisable for Argentina for its long history of contractual violations and institutional reversions. In other words, the probability that a Government in the middle of a financial crisis will put a bond forcibly into bank reserves or liquidity funds, thus unleashing banking panic is too high.

Panama found an interesting solution. A new model of commercial banking was set up in 1970. It works under national law, without liquidity funds or reserves requirements. It is highly integrated with World capital markets and has been very successful so far. Yet this solution is not advisable for Argentina. The probability of repudiation of this type of banking legislation is as high as that of a new Convertibility law.

It's better to consider a commercial banking system under foreign law. Banks from abroad would establish branches in the country instead of limited liability companies. The branches would lend money to resident as well as foreign customers without any regulatory bias, in order to diversify risks and stabilize the value of deposits. Branches' balance sheets would merge with those of their headquarters, so that possible branches' losses are covered by their headquarters as in Panama. In turn, local banks in association with prestigious international banks would qualify to receive deposits and give loans on account of their foreign partners. This arrangement aims at three goals: a) commercial banking is safe from forced placement of bonds by Government; b) international banks take over the role of lender of last resort of commercial banking, employing to that end their own funds or those provided by their Central Banks; c) the cost of repudiation of banking legislation is high. A new commercial banking model like

this one would have a higher probability to endure and help reduce country risk (Ávila 2004).

9. Dollarization is a rigid system, so it is a bad policy.

It's not easy to understand the accurate meaning of this mantra repeated by 99% of my colleagues. They may be afraid of any of the following restrictions: a) the possibility of melting down a wage rise above productivity is no longer available; b) the same for the possibility of melting down a hike in public spending; c) the same for the possibility of foreign-exchange fine tuning; d) the possibility of adjusting to changes in capital flows is limited.

The first restriction is true. Government would somehow lose degrees of freedom in this aspect. In a dollarized economy, business and trade unions will have to set wages at a level consistent with a currency that cannot be devalued. If they made a mistake, they would pay for it through recession and unemployment. But only the first time, since the second time they will know how the system works. Of course, dollarization needs some degree of decentralized wage bargaining.

On the second restriction, international evidence teaches us that dollarization generates a bias towards fiscal discipline (Jácome y Lönnberg 2009). Yet for Argentina this result may not be valid. As far as we know, there is no such thing as a fiscal arrangement with high cost of repudiation. Consequently, as long as banks do not fall and the currency is not devalued, we should accept an occasional sovereign default without dramatizing.

On the third restriction, first let's clarify the concept. A fine tuning policy consists of devaluing the currency a little bit in an economic downturn to put a limit to recession and deflation, and revaluing a little bit in an economic boom to put a ceiling to an excessive expansion and inflation. We have read about fine-tuning experiences in other countries but we do not recall any Argentine experience in this respect; we cannot lose a tool that we never had. Nevertheless the fundamental argument against fine tuning is not historical but conceptual. From the macroeconomic standpoint, Argentina is a weird case. Besides having a bimonetary economy, its production and

employment levels are determined by country risk. Fluctuations in the country risk premium determine the direction and magnitude of capital flows; fluctuations in capital flows determine in turn aggregate demand fluctuations, and aggregate demand fluctuations determine finally the business cycle (Ávila 2010). So we conclude that in the Argentine case fine tuning must be useless.

On the fourth restriction, we should not bypass the fact that fluctuations of capital flows cause large real-exchange rate fluctuations. But we should not bypass another big fact: Argentina has one of the World closed economies. Openness to international trade has a macroeconomic dimension. Assume two identical countries producing each a $100,000 per-year GDP. The closed country exports $10,000 per year and imports the same value; the open country exports $30,000 per year and imports the same value. A crisis happens and the trade balance goes from zero to $4,000 per year to finance capital outflows. In the closed country exports increase to 11,000 and imports decrease to 7,000, while in the open country exports increase to 31,000 and imports decrease to 27,000. Thus while in the former case exports increase 10% and imports decrease 30%, in the latter exports increase 3% and imports decrease 10%. It's not bold to state that the pressure to raise the real-exchange rate (lower the real-wage rate) must be stronger in the closed country than in the open one. Consequently, this pressure must be stronger in Argentina, where exports stand for 10% of GDP than in Chile, Mexico or Spain, where exports stand for more than 30%.[3] For a country characterized by wild fluctuations of the real-exchange rate, dollarizing without an ambitious and lasting opening to trade could be a failure in ten year-time.

If Argentina had the power to issue reserve money and first-class sovereign debt, that is to say if the country had the capacity to apply classical countercyclical monetary and fiscal policies, it would be a waste of time to advise its dollarization. Now, taking into account that Argentina is a zero-trust country, we find that an irreversible dollarization, as developed here, is the safest passageway to monetary stability and economic liberties, which are generally the first victims of instability.

[3] The degree of openness of Ecuador, El Salvador, and Panama is much greater than that of Argentina: 30%, 37% and 71% of GDP, respectively. Own estimates for the period 2005-2014 based on International Financial Statistics 2016.

4. Re-Shaping of Commercial Banking

Argentina underwent a mild banking panic in 1980, a severe one in 1995, and a fatal one in 2001 (Ávila 2004). None of them happened by chance. A common factor played a role: the combination of fractional reserves and a fixed exchange rate. But these two regimes are not compatible; they should not exist side by side. A country with a fixed-exchange rate is prone to banking panics. It's easy to see why.

By definition, with fractional reserves banks can convert just a fraction of their deposits into cash. Therefore, not to close their doors in the middle of a banking panic, they need a lender to discount illiquid assets. But discounting implies monetary expansion and, with a fixed-exchange rate, this leads to a balance-of-payments crisis.

Dollarization is the extreme version of a fixed-exchange rate regime. The Central Bank, whose goal is to help banks as a last resort lender, simply disappears or is transformed into a banking superintendent. The challenge is to find a balance between dollarization and fractional reserve banking. The Simons proposal can be an alternative. Though if implemented it would radically change the present organization of commercial banking. We guess that's why nobody has dared to do it so far (Ávila 2004).

Among the main dollarized countries, Ecuador and El Salvador came up with solutions which combine high fractional reserves and liquidity funds under the supervision of so called central banks.[4] In turn, Panama applied a most interesting and innovative policy. In the next pages, we will review this policy and finally, building upon the Panamanian banking model, advance a proposal especially thought out for the Argentine case.

Panama was born as an independent state in 1903. The next year the country adopted the American dollar as legal currency and two banks (one American and the other State-run) were established. The banking activity expanded freely in the country thanks to its comparative advantage as a bridge between North and South America. Towards the end of the 1960s, more than 100 banks functioned in Panama though

[4] These fake institutions have no power to print money or control its quantity.

they were not proper financial intermediaries. The banking law of 1970 was a landmark in the development of banking. Many institutions fell while the Government aimed at attracting prestigious international banks (Superintendency of Banks of Panama 2018). Those that remained and the new ones were organized in this fashion:

* Towards year 2000, there were 59 banks with license to work in the domestic and the international markets; 28 with license to work in the international market exclusively, and one public bank, besides 14 representative offices (Goldfajn and Olivares 2000).

* Banks can be national or foreign. And the latter can organize as branches or limited liability companies.

* The balance sheets of the branches merge with those of their foreign headquarters.

* Foreign headquarters may certify that branches fulfil the prudential regulations set by their governments, especially those referring to required minimum capital or solvency. This certificate is taken as valid by the Superintendency of Banks of Panama.

* Headquarters pay for loses of their branches just as the Buenos Aires headquarters of Argentine banks pay for loses of their provincial branches.

* Established banks in the country can lend indifferently to local and foreign customers, without regulatory bias. Because of this feature Panamanian dollarization is known as a 'dollarization with financial integration' (Hanke 2002, Moreno Villalaz 2005). Note that international diversification of bank assets helps stabilize the value of deposits.

* The system works without legal reserve requirements, interbank liquidity funds and deposit insurance, and of course without the assistance of the Federal Reserve System as last resort lender. Should a bank close, customers with deposits up to $10,000 would have priority to withdraw their money. The IMF and other multilateral institutions have recommended some of the above mentioned prudential norms, yet fears of moral hazard would have prevailed.

* The Superintendency of Banks demands two things basically: a) own capital must not be less than 8% of total bank assets, according to Basel rules; b) legal liquidity must not be less than 30% of net deposits. The latter are defined as total deposits minus deposits belonging to headquarters and other branches.

* Legal liquidity can be made of: a) gold or legal currency; b) net balances in foreign banks already approved by the Superintendency, checking accounts or savings accounts for a period not exceeding 186 days; c) debt issued by foreign governments or multilateral financial institutions approved by the Superintendency, actively traded in the Stock exchange; d) national or foreign firms' debt approved by the Superintendency, actively traded in the Stock exchange, with investment grade certified by a risk-rating agency of international renown, at market value; e) national Treasury notes and other Government debt with a maturity of no more than a year, at market value.

The specialized literature does not record banking panics in Panama except for the crisis of 1987/89. At the Superintendency of Banks there are no memories of panics either, we were told. This is a striking fact for a country with no Central Bank. A good part of the explanation could be the blend of the legal liquidity requisite, the role of branches in the banking system, and the international diversification of loans.

The origin of the 1987/89 banking crisis was political; it was a conflict between General Noriega and the U.S. government. Banks shut down for nine weeks and a half, the Panamanian government defaulted on its debt, and national GDP fell more than 15% (Moreno Villalaz 1999, Hanke 2002). As time went by, commercial banking regained stability. Russia's default in 1998 and the sub-prime crisis in 2008 did not undermine it significantly.

* Nowadays banking credit amounts to 90% of GDP. Out of this total, 98.4% goes to the private sector and the remaining 1.6% goes to the Government. The total does not include credit going to the rest of the World. It is worth noting that in Panama loans are divorced from deposits. Banks can lend over their deposits.

* Mortgage credit amounts to 30% of GDP, at interest rates of 5/6% per year and for a term of 30 years. Personal consumption credit represents 21% of GDP. And credit for retail business and construction average 13% of GDP each.[5]

Once again, for dollarization to be enduring we should reorganize commercial banking. The Panamanian case is quite suggestive. Financial integration stands out. In spite of the ups and downs of this country's life, commercial banking under national law has stayed integrated with World capital markets.

The axis of the Argentine commercial banking organization should be the establishment of branches of prestigious international banks. Our model differs from the Panamanian model in three aspects: a) national banks should become partners of prestigious foreign banks to receive deposits and make loans on account of their international associates; b) commercial banking should remain under foreign law; c) given conditions a) and b), the legal liquidity requirement could be lower than in Panama.

All discrimination of national banks is justified by the absence of a last resort lender. As regards the deposit-and-loan activity only, national banks would be a kind of branches of their foreign partners. This feature of the new organization would help to guarantee the stability of the banking system. And the substitution of foreign law for national law would bring the benefits of irreversibility we have emphasized in previous sections of this paper.

Last but not least, we cannot overlook the fact that Panamanian banks have been able to keep the value of their deposits stable for decades. Nowadays, we are talking about $48 billion, a figure close to 60% of Argentine bank deposits. It is a great accomplishment. Think that the GDP of Panama is barely a tenth of that of Argentina.[6]

5. Conclusion

[5] Unless pointed out otherwise, information on the Panamanian banking system so far referred to was made available by J. Motta.

[6] Own estimates based on International Financial Statistics 2016 for Panama, and Informe Monetario 2018 for Argentina.

Much has been written on dollarization. Not much, if any, on lasting dollarization, by which we understand a regime strong enough to withstand banking panics and the lobby of protected industries in order to repudiate dollarization and devalue the currency. Considering the long history of monetary instability and institutional reversibility of Argentina, we have discussed the main steps for a durable dollarization of this country. The purpose of our plan is for investors to perceive the new regime as irrevocable so that the Argentine risk premium moves downwards to the Chilean risk premium.

On irreversible reforms, by which we understand reforms with a high cost of reversion, we wrote somewhere else (Ávila 2015). This time we provide examples and references of the operation of the banking and trade reforms. The most innovative part of the paper is Section 4, where we develop a banking model inspired by the experience of Panama. We call for branches of prestigious international banks to establish in the country under foreign law, and national banks to be partners of prestigious international banks in order to offer deposits and loans.

Dollarizing with financial integration and free-trade agreements with superpowers will bring a degree of monetary and financial stability not seen by this country in a century. From which we expect a strong incentive to capital accumulation within the Argentine jurisdiction.

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