Argentina: The Efficacy of an Exchange Rate Anchor

Paul Kenny – Senior Sophister

Argentina's experience with hyperinflation is investigated by Paul Kenny in this essay. The author examines the differing methods of controlling hyperinflation and the effectiveness of Argentina's fixed exchange rate with the Dollar. He concludes by outlining why the exchange rate anchor failed Argentina and the cost of this failure.

'This kindness will I show.
Go with me to a notary, seal me there
Your single bond; and, in a merry sport,
If you repay me not on such a day,
In such a place, such sum or sums as are
Express'd in the condition, let the forfeit
Be nominated for an equal pound
Of your fair flesh, to be cut off and taken
In what part of your body pleaseth me'. – Shylock

From William Shakespeare's *The Merchant of Venice*

Introduction

Hyperinflation is a devastating economic phenomena. While it does not occur regularly, and is isolated to particular types of economies, the severity of the consequences associated with it demand the attention of economists. Further, the adverse effects of hyperinflation may not fall solely on the domestic economy, as through the increased contagion effects from globalisation and international interdependence, it has a greater potential to impact on a wider scale. For these reasons, it is imperative that the means by which a struggling economy can halt hyperinflation are examined.

In this essay I shall discuss firstly the causes and characteristics of hyperinflation. Then using Argentina as an example, I will illustrate the implications that the myriad of social and political factors have on a country's economic development and how these can feed into high inflation. I aim to show the difficulties faced by an economy experiencing hyperinflation and illustrate the proposed solutions before specifically examining the efficacy of Argentina's stabilisation policy; the corner stone of which was the Law of Convertibility, which created a new currency, the Argentinean Peso and guaranteed its exchange rate at one-to-one with the US dollar.

Hyperinflation

'Inflation is always and everywhere a monetary phenomenon' – Milton Friedman[1]

Most economists acknowledge the claims of the Quantity Theory of Money as being true (Mankiw, 1998)[2]. Inflation essentially occurs when the authorities print money at a higher rate than the economy is growing. Usually, this process is not deliberate, and is the result of the misinterpretation of economic data and unpredictable economic shocks. Hyperinflation (monthly inflation in excess of 50%) is peculiar however, in that the government, effectively prints money to finance its deficit. Countries, like Argentina, faced with a budget deficit must finance it either by borrowing domestically or abroad, or by printing money. As the country's total debt rises, capital markets dry up, and along with the associated inability to raise revenue through taxation; the authorities can have little choice but to finance the deficit by means of the inflation-tax. Unless the government corrects the underlying fiscal position, it will have to finance the deficit by printing more money. As inflation rises, the purchasing power of money declines, and the demand for money falls. As demand for money falls, like a good so does its price; the real money stock declines and the government must print yet more money to finance its swelling deficit. The detrimental effects of this spiral are perpetuated by the time-lag involved in collecting tax revenue known as the Tanzi-Oliviera effect; as taxes demanded are based on nominal income, after a few months of hyperinflation, the real value of revenues decreases so rapidly that it is worth little by the time it is received. As the deficit increases, so does the dependence on seignorage; hyperinflations are thus a vicious circle that can only be halted by restructuring of the country's fiscal position. Unremitting government fiscal profligacy cannot continue; eventually, their "pound of flesh" will be due.

In the case of hyperinflation, prolonged growth in nominal money to finance the deficit is the problem; but what is the cause? Underlying social, political and economic factors provide the impetus behind inflation. It is no coincidence therefore, that hyperinflation has been endemic in certain economies of the world. In

---

[1] Friedman & Schwarz, *A Monetary History of the United States 1867-1960* (Princeton, N.J.: Princeton University Press for NBER, 1963).

[2] For a detailed discussion of the Quantity theory of money, see above, Friedman...

the aftermath of war, countries often find themselves buried in hyperinflation; Germany in 1922-23, and Hungary in 1945-46 provide examples of this. Former socialist republics of Eastern Europe, such as Russia and the Ukraine, have also experienced prolonged hyperinflations following the collapse of Communism. Latin American economies make up the last major group. This latter grouping perhaps provides the most interesting example of hyperinflation, as the factors that underpin them seem at first less palpable. Argentina is typical in many ways of the Latin American economies that have experienced such high levels of inflation. Like them, civil and political strife provide the backdrop to Argentina's economic development, but what is peculiar in its case, is the relative position of affluence that the county had at the beginning of the last century compared with the current situation of a county that is insolvent in all but name.

Argentina's Development in the 20th Century

Argentina began the 20th century among the world's most prosperous economies. The country held a strategic importance in Latin America, and although Argentina remained neutral during WWI it played a major role as supplier of foodstuffs to the Allied forces. In 1929, the country had a per capita income roughly equivalent to that of France, but the world economic crisis of that year had major ramifications for Argentina. The 1930s and subsequent war years were characterised by political turmoil and associated poor economic performance. Following WWII, the populist Peron government came into office, and in October 1946, President Peron promulgated an ambitious five-year plan for the expansion of the economy. The following years saw the Argentine system become increasingly authoritarian as the Peronistas secured their positions of power. In March 1949, Peron established a new constitution, which removed a previous article that prohibited a president of the republic from a successive term in office. The Peronista party took advantage of the new law, and in July 1949 re-nominated Peron as its presidential candidate for 1952. While the opposition refuted the legitimacy of the new constitution and the press spoke out against the illiberality of the political system, the Peronista majority in congress further entrenched its position by the introduction of legislation that provided prison terms for persons who dissented against the government. Many opponents of the regime were jailed in subsequent months. In January 1953 the government inaugurated a second five-year plan. The focus of this plan would be on increased agricultural production rather than industrialisation, which had been the goal of the first five-year plan. 1953 also saw the establishment of important economic and trade agreements with several countries, including Great Britain, the USSR, and Chile. The country's current account moved into surplus for the first time since 1950, but inflationary pressures, which had resulted in a cost of living increase of more than 200% since 1948, did not abate.

The Peronist government was eventually overthrown in a brief but bloody uprising during which approximately 4000 people were killed. Representative government was restored on May 1, 1958. Despite the persistent rise in the price level, some degree of economic stability had returned by early 1959 thanks to the aid of substantial foreign loans and credits, in particular from the United States. Argentina's participation in the Latin American Free Trade Association (LAFTA), founded in 1960, had helped to foster a growing trade with other countries in the region. In July 1963, Arturo Illia was elected president. Illia announced a program of national recovery and regulation of foreign investment and tried to control rising prices, shortages, and labour unrest by fixing prices and setting minimum-wage laws. His policies were resisted however and the result was a military coup in June 1966. General Lanusse, the third of successive military leaders, took presidential office in 1971. In the early months of this regime, a return to civil rule was proposed and an economic program designed to hold down the inflationary spiral announced, but by 1972, the country became increasingly torn by violence, including strikes, student riots, and terrorist activities. The social fabric in Argentina continued to deteriorate rapidly.

The return of the Peronistas to power in 1974 did little to halt the decline in economic conditions; civil strife still plagued the country. In 1975 more than 700 people were killed at the hands of both right and left wing terrorists. The cost of living increased by 335%, and strikes and demonstrations for higher wages were frequent. On March 24, 1976, another military junta seized power. The junta dissolved the legislature, imposed martial law, and ruled by decree. The brutal Videla regime was blamed for thousands of political killings, arrests and disappearances in a widespread terror campaign. Following defeat in the Falklands conflict in 1982 the country was near bankruptcy. With an unprecedented international debt, and inflation at more than 900 percent, Argentina held its first presidential election in a decade in October 1983. When the new government was instated, the foreign debt was restructured; fiscal reforms (including a new currency in 1985 called the Austral which was equal to 1,000 pesos) were introduced; but inflation remained unchecked. State bodies had developed an institutional reliance on deficit spending financed by means of the inflation-tax.

For Argentina, the trade balance tends to be favourable when world demand for food is high. In the late 1980s, Argentina's balance of trade had continued to be strongly positive; it had annual imports and exports of about \$3.9bn and \$9.6bn respectively. However at the end of that decade there was a dramatic vicissitude in world commodity prices, the sector upon which Argentina was most heavily reliant. Argentina's current account fell into deep deficit, and the associated budget deficits had left the county in major economic crisis. In 1989, Raul Alfonsin was forced to resign as president amid hyperinflationary chaos, which saw angry mobs looting and rioting in the streets. Inflation averaged 3,080% (with some commentators estimating a peak of 5,000%) in that year. When the Peronist candidate, Carlos Saul Menem was elected president in May 1989, Argentina's economy was deteriorating rapidly; his administration had to act fast. Under Menem, stabilisation programmes were initiated in both 1989 and 1990, but each failed, leaving the economy still encumbered with high inflation.

Hyperinflation: The options

There are a number of generally accepted principals that must be employed to end hyperinflation. Orthodox stabilisation policies have two broad components (Blanchard, 2000)

> *There must be significant consolidation of the fiscal position.*
> On the expenditure side, institutional reform is needed to improve the productivity of the public sector often involving privatisation policies. Reform of the social security system may be needed, as are across the board cuts in capital expenditure. On the revenue side, tax take must be maximised. Both the optimal rate of taxation, and increased participation in the tax-system must be addressed.
>
> *Credible monetary reform is needed.*
> This can be achieved either through an official decree, establishing an independent Central Bank and proscribing it from issuing money to buy government debt; or more credibly, by adopting an exchange rate peg to a country with low inflation; or again more radically, the full adoption of the anchor currency. These measures have the effect of limiting the government's ability to finance the deficit by seignorage.

Some argue for the introduction of price and wage controls. However if the first two steps are met, such heterodox policies should not be needed. Other facilitating reforms may be included in the stabilisation plan (McAleese, 2001)

- Trade liberalisation.
- Liberalisation of capital.
- Financial sector reform.
- Restructuring of liabilities from foreign to domestic creditors.
- Deregulation of labour markets.

What did Argentina do?

Argentina had experienced five successive failed stabilisation plans from 1984 to 1990, including one in each of the last two years (1989 and 1990), so what could it now do different? Because of the degree to which economic stabilisation plans are married to political and social stability, in essence one cannot exist without the other. The repeated attempts of Argentinian authorities to redress the inflation problem were continually met with public and institutional resistance. Without the requisite credibility of the government's commitment to reducing the inflation-tax, people were unwilling to accept moderation in wages and inevitable short-term decline in output associated with contractionary measures.

In April 1991, Carlos Saul Menem's government introduced the Law of Convertibility, which guaranteed one-to-one convertibility of the new currency, the Argentine peso (worth 10,000 australs, or 10,000,000 of the original peso moneda nacional or paper peso) into dollars. This effectively prohibited the monetary authority from creating money other than to buy net foreign reserves to preserve the exchange rate. At the same time, the government introduced many accommodating policies, including widespread structural reforms aimed at redressing Argentina's endemic fiscal profligacy. A rapid privatisation policy was put in place and reforms were made to the social welfare system. Capital spending was slashed, and labour and financial markets were restructured. In a further move, although the ruling party had previously appeared diametrically opposed to free market ideals, international trade and capital liberalisation policies were introduced to improve the balance of trade position.

The results of the Government's reform program were dramatic. The traditional Keynesian interpretation would anticipate contractionary effects to result from demonetisation, (whereby nominal money declines at a greater rate than inflation, resulting in a decrease in the real money stock and pursuant higher interest rates) and from a retrenchment of the fiscal position (which reduces aggregate demand and hence output). Argentina's experience was however contrary to this expectation; the country experienced strong economic growth in the 1990s, with average growth from 1991-94 of 7.7%. The size of the economy expanded from an estimated $141bn in 1990 to $298 billion in 1998. Almost instantly following the peg to the dollar, Argentina moved from a position of experiencing hyperinflation, to one of the world's lowest rates of inflation (fig.1). Consumer price inflation was negative in 1999, and wholesale prices rose by a mere 1.2%. The Federal Government's fiscal deficit receded from an average of about 6-8% of GDP for most of the 1980s to 1.4% in 1998. The Argentine reforms seemed an indisputable success. Despite a short-term blip following the Mexican peso crisis of 1995, which resulted in an estimated contraction of 4.4%, the economy returned to real GDP growth of 5.5% in 1996 and 8.1% in 1997.

Fig. 1. Source: IMF, International Financial Statistics (various issues)

Argentina: Annual Inflation %	
1987	131
1988	343
1989	3080
1990	2314
1991	172
1992	25
1993	10.6
1994	4.2
1995	3.4
1996	0.16
1997	0.3
1998	0.7
1999	-1.8
2000	-0.7
2001 Q1	-1.0
2001 Prog	-0.0

However...

After years of inflation, the domestic capital market remained thin throughout the

1990s, and the rate of monetisation low for a country of Argentina's income level. As a consequence, the proportion of public domestic debt was very low. Both government and large private industry continued to depend on short-term loans from foreign capital markets to finance spending. At the same time, the lack of domestic credit restricted access to funds for small and medium industries. The Argentine economy was thus highly vulnerable to external shocks. Despite the government's efforts to redress the large amount of external indebtedness and the dependence on external capital flows to finance increased investment levels, the economy remained exposed. The investment-led growth of the early 1990s saw significant increases in output, but the period did not produce matching increases in job creation. High unemployment meant continued internal social instability despite the seemingly steady macro economy. The fickle nature of international capital flows to Latin America following events like the Mexican currency crisis of 1995 and the Brazilian crisis of 1997 put the Argentine economy in a precarious situation.

After growth of 3.9% in 1998, the country went into recession in 1999, with the economy contracting by 3.1%. As lenders began to doubt the ability of Argentina to repay its loans, capital inflows began to wane. This fed into a reduction in output, further job losses, decline in consumer spending, deflation and a steep downward spiral of the economy resulting in recession. The slump led to a sudden increase in the federal deficit to 2.6% of GDP (excluding privatisation revenues). The currency crises in Asia in 1997 and Russia in 1998 had significant negative implications, but it was the Brazilian devaluation (Argentina's largest trading partner) that had the more severe impact. Tied to the dollar, Argentina's currency was by far overvalued. The US economy went through a boom of unprecedented size and duration in the 1990s, which had two important effects on Argentina; the real value of the dollar appreciated against other national currencies bringing with it the value of the peso; and interest rates at the Federal Reserve rose steadily, implying upward pressure on Argentine lending rates. The resultant loss of competitiveness, and deterioration of the balance of payments was becoming unsustainable. A fall in world commodity prices and adverse weather conditions compounded the situation.

The economy could have perhaps ridden out the storm were it not for the seemingly rather innocuous events of February of 1999. What began as a banking scandal involving allegations of corruption by two high-ranking officials in the Central Bank, resulted in demands for the resignation of Pedro Pou, the governor of the Central Bank. Pou's enemies wanted a devaluation and jumped on this opportunity to instate Domingo Cavallo to the position of governor. Cavallo had been known for his inclination towards adopting a fixed exchange rate based on a basket of currencies rather than the dollar alone. Cavallo argued that the dollar was now an inappropriate choice for a currency anchor. The notion of two countries either operating under fixed exchange rates or more extremely, adopting a single currency was explored by Robert Mundell. He asserts that for two countries to constitute an optimal currency area, two conditions must be met. The participating economies should experience similar economic shocks so that similar policies would be optimal in any case; or failing this, there should be high factor mobility between the states. The divergence between the US and Argentine economies over the course of the late 1990s had made the dollar an entirely inappropriate anchor currency for Argentina.

The success of a currency peg, as in the case of Argentina may ultimately depend on the credibility of the system, which arguably in turn depends on economic fundamentals. Either way, speculators saw Cavallo's proposal for what it was: a devaluation. The integrity of Argentina's peg to the dollar had come under enormous pressure. Market participants became increasingly sceptical of Argentina's ability to sustain the current exchange rate, and began a run from the currency. About $20 billion is believed to have fled the economy last year[3]. Much like the self-fulfilling nature of exchange rate crises, the increased risk of a devaluation forced up domestic interest rates in order to encourage the retention of domestic verses foreign bonds. The 30-day deposit rate went up to 8% in 1999, choking off investment and burying the country in recession. Further, in order to preserve the currency, the government bought up pesos with its foreign reserves, further weakening its balance of payments position. Recession had resulted in an estimated deficit of $9 billion in 2000[4].

Where to then?

By 2001, the Argentinian currency was clearly overvalued, but the government persisted with the peg, and perversely hoped to achieve a devaluation through deflation; a painful process to which no doubt, the near 20% unemployed in Argentina would testify. Towards the end of 2001, draconian capital controls, limits on bank withdrawals and regulation were all imposed in the name of the currency peg. The Argentinian authorities failed to recognise that the use of an anchor currency was a means, not an end in itself. Although at this time there were proponents of full dollarisation to solve the crisis, this in fact would have done little

---

[3] *The Economist*, January 12th, 2002

[4] The Irish Times, January 7, 2002, P.14

to help the situation. While speculation against the currency would have been ended, the same fundamental economic problem would have remained. The currency was overvalued, and a nominal devaluation was needed to correct it.

By December 2001, it is alleged that Pesos were already trading on the streets at 1.10 to the dollar. Political turmoil ensued once again; the public taking to the streets in protest, on December 21st, 27 people died in the riots, which ultimately toppled President Fernando de la Ruà. A degree of stability was finally restored with the instatement of Eduardo Duhalde, a populist from the Peronist party, as the fifth president in two weeks. Mr. Duhalde's government adopted an emergency law to end the 10-year parity with the dollar. The currency was temporarily fixed at 1.40 Pesos to the Dollar for trade and capital transactions while it would be allowed to float for other exchanges. While ultimately necessary, the devaluation will undoubtedly cause problems; 80% of loans are in Dollars while wages are paid in Pesos. A nominal devaluation thus raises the value of external debts. However, the alternative of trying to achieve the devaluation through deflation rather than a nominal devaluation of the peso is no more attractive, as deflation raises the real value of debt to just the same extent. To ease this pressure, the government pledged that Argentinians will be allowed to repay dollar debts of up to $100,000 with pesos at one-for-one. Yet at the same time, measures such as the $1,000 limit on bank withdrawals remain in place, and will do little to engender public support. The savings of ordinary citizens are literally being wiped away as spiralling inflation lowers the real value of their savings, which they cannot access.

Conclusion

All in all, a nominal devaluation and the subsequent adoption a floating exchange rate, similar to that of other peripheral southern hemisphere economies like Australia or New Zealand, was the only realistic option for Argentina. The use of the one-for-one peg to the dollar, while initially successful in establishing the credibility of the state's commitment to countering inflation, should have merely provided the basis on which Argentina could carry out the necessary fiscal and structural reforms to ensure future prosperity. Despite years of stability-led growth up to 1995, which saw a substantial reduction in the fiscal and current account deficits, still not enough had been done. Following the recession of that year, the extent of Argentina's dependence on international capital markets became clear and although money returned to the economy, arguably the initial confidence of investors in the Argentine economy and the sustainability of the peg system itself were irreparably damaged.

Finally, let me answer the question I posed at the beginning. Is the use of an exchange rate peg an effective means of controlling hyperinflation? There is not an entirely succinct answer to this. To the extent that the credibility of the authority's commitment to ending inflation is achieved, it is useful. Credibility can have the vital effect of establishing realistic and sustainable expectations of wage growth, upon which fiscal and structural reform can take place, but without quick and decisive action to turn around the fiscal deficit (the fundamental problem behind hyperinflation), the restructuring of foreign-held debt, and the reorganisation of domestic labour and capital markets, the currency peg alone will almost certainly fail.

In the words of Anne Krueger, First Deputy Managing Director and acting Chair of the Executive Board of the IMF in September 2001,[5]

'Firm implementation of fiscal consolidation is needed to ensure the sustainability of the public debt and to produce a lasting decline in the risk premium on Argentine debt and of domestic interest rates, thereby creating the conditions for a recovery of economic activity.'

Sadly for Argentina, such reform and consolidation of the fiscal position was needed long before then. The future for Argentina is uncertain.

Bibliography

Blanchard, O. (2000) *Macroeconomics*. New Jersey: Prentice Hall.

Honohan, P. & Lane, P. (Autumn 1999) 'Pegging to the dollar and the euro', in *International Finance.*

Madden, D. (2000) 'Taxation, Debt and the Public Finances', Ch 4 in O'Hagan, J. W., *The Economy of Ireland: Policy and Performance of a European Region. Dublin:* Gill & McMillan.

Mankiw, N. G. (1998) *Principles of Economics.* Orlando: The Dryden Press.

McAleese, D. (2001) *Economics for Business: Competition, Macro-stability and*

[5] IMF, Press Release NO. 01/37, September 7, 2001.

Globalisation, London: Prentice Hall.

Microsoft (1997) Encarta Encyclopaedia. Standard [CD-ROM].

Miles, D., & Scott, A. (2001) *Macroeconomics: Understanding the Wealth of Nations.* New York: John Wiley & Sons.

The Economist. (December 22, 2001) 'Patience Wears Thin', p.63.

Online References

Hanke, S. H., (Apr 28, 2001), 'Argentina's Boom and Bust', Cato Institute, http://www.cato.org /dailys/40-28-01.html,

International Monetary Fund www.imf.org

Krugman, P., 'Argentina's Money Monomania' http://www.wws.princeton.edu/~pkrugman/mania.html

WorldBank, www.worldbank.org