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HETERODOX STABILIZATION PROGRAMS IN ARGENTINA AND BRAZIL

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In the "lost decade" of the 1980's (as it came to be known), many Latin American countries languished under the twin burdens of a crushing foreign debt and runaway inflation. In many places, this crisis was being faced by fragile, newly installed democracies.

Settling on a solution was difficult because the governments were being pulled in several different directions at the same time. Foreign banks demanded that loans made to the preceding military regimes be repaid in full otherwise any additional, much-needed credit would be withheld. In addition, the loans were contingent upon the adoption of strict monetary measures (deflationary and recessive, such policies were intended to bring stabilization through "controlling public deficit and aggregate demand"[1]). Recalcitrant trade unions opposed this. Rather than bleed the economy white by sending capital abroad, they felt it was better to keep the money and invest it at home with government spending and wage increases.[2]

The <u>cause</u> of all of Latin America's fiscal difficulties was the subject of debate as well. Economists were divided into two camps: structuralists and monetarists. Both groups agreed that inflation was related to the increase in the supply of money, but the "monetarist answer to the question of why the money supply has increased revolves around the notion of financial irresponsibility, while the answer of the structuralist is that the hands of the authorities are forced by exogenous circumstances."[3] Did inflation go on to cause the balance of payments crisis or was it the other way around? Structuralists and monetarists disagree on that, too.

Austerity versus spending, structuralism versus monetarism; ultimately the governments of Argentina and Brazil would try to split the difference between these various interests. In the early 1980's, the "gradualist" approach attempted to reconcile austerity with spending. Combating inflation while simultaneously "fostering economic growth and income redistribution"[4] did not seem to work, so both the Argentine and Brazilian governments decided to take more drastic action.

Rather than follow the "orthodox" monetary approach favored by the foreign banks and the International Monetary Fund (IMF), both governments tried to again come down in the middle with a mix of monetarist and structuralist policies; a "heterodox" stabilization plan.[5]

In Argentina, this program was called the "Austral Plan" while the similar "Cruzado Plan" was adopted in Brazil. What led to their development? What did they consist of? How did they perform?

Structuralism vs. Monetarism: The Great Debate in Latin America*

Argentina and Brazil's heterodox programs were a combination of elements from the two somewhat divergent structural and monetary schools.

Structuralists. This structuralist theory came from economists in ECLA, the Economic Commission on Latin America. It said that inflation was the result of a balance of payments crisis with the developed world. With their foreign currency reserves depleted, countries had a diminished "capacity to import"[6] and were forced to begin import substitution.

Producing their own locally manufactured goods meant rapid industrialization and urbanization. The increased population in the cities led to a greater demand for food there and thus a higher price. But instead of a supply-and-demand reaction in the rural areas to produce more food, little resulted.[7]

Why? Many farms in the existing structure of Latin America fall into one or two categories: a latifundio (a large estate) or a minifundio (often a subsistence plot). The owners of the latifundia were not entrepreneurs and had no interest in increasing output (since they were already extremely wealthy) while the minifundio farmers, who may have wanted to produce more, were unable because they did not have enough land, lacked the necessary modern machinery and could not get credit.[8] Thus output remained the same despite higher food prices.

The structuralists went on to say that it was due to this inelastic supply curve that food prices would increase to the point where workers would demand higher wages to compensate for it. Obviously, higher wages would lead the price of manufactured goods up and start the inflationary cycle. Moreover, the lack of competition from cheap imports left prices free to skyrocket.[9]

The structuralist solution? Inflationary pressure had started because of the unresponsive, archaic structure of agriculture so changes through land reforms would be needed to remedy "inefficiency on the minifundia level,. . . .low land utilization on the latifundia level"[10] and make the countryside more amenable to the needs of the urban population.[11]

In addition, some inflation may take care of itself. Rapid industrialization and urbanization means a greater need for infrastructure, and in order to build more infrastructure the government must run deficits, causing some inflation. But in the end this will be paid for with the economic growth from the new industry and populace. So perhaps, not all inflation is bad.[12]

<u>Monetarists</u>. Where the structuralists had felt that the balance of payments crisis caused inflation, monetarists

saw it the other way around; inflation had caused the balance of payments crisis.

Mostly associated with the IMF, monetarists believed that inflation was due to a country's Central Bank being abused by its government. In Latin America, rather than being independent the Central Bank is usually subordinate to the government's Finance Ministry. Rather than raise taxes or cut spending in the face of a deficit, governments will "borrow" money from their Central Bank as an easy way out.[13] In essence, the bank prints more money and inflates the currency.

Once inflation starts to flare up, government continues with the "no pain" approach to combat it. Public utilities and state enterprises are not allowed to increase their prices with inflation in an effort to keep the cost of living down. The government might even force a state enterprise with a good reputation to borrow money on the world market. As a result, public utilities will eventually begin to lose money and need government subsidies to make up for it, adding to the deficit. State enterprises forced to take on debts will have to make payments and efficiency suffers as a result.[14]

If exchange rates are fixed, domestic inflation will make imports relatively cheap and exports less competitive as the country's inflated currency becomes overvalued on the world market. Much to the chagrin of wealthy agricultural exporters, governments were loathe to devalue their currency for fear of the sudden increase in the price of imports fueling inflation. If a currency is left overvalued for long the resulting trade deficit will evaporate foreign currency reserves and lead to a balance of payments crisis.[15]

Impact of Inflation. Regardless of what had caused it, inflation was well on its way to destroying the economics of Brazil and Argentina. It had caused a misallocation of resources as people tried to protect themselves against unstable prices.[16] In an effort to become as illiquid as possible, land and other non-perishable goods were bought and thus savings were placed in non-productive resources. In many cases, capital simply left the country altogether.

Also, to the detriment of the economy, businesses limited themselves to involvement in short-gestation projects since starting to produce quickly was a safeguard against the uncertainty of the future. Long-term projects were rare.[17]

Penalties for delinquent tax payments in some Latin American countries are not too severe, so in an inflationary economy the longer one waits to pay the better. Paying with inflated currency means the taxpayer saves and government loses. It loses revenues and thus ends up with an even bigger deficit.[18]

How would Argentina and Brazil go about correcting these problems?

The Austral Plan

Background. In December 1983, Raul Alfonsin inherited an economy that was in a shambles. Argentina was stagnating under a $45 billion debt and fast approaching hyperinflation. Things had not been so bad in half a century.

Alfonsin's political strength was quite ephemeral, owing less to his Radical Party's popularity than to the aberrant unpopularity of the Peronists, who were rumored during the campaign to have engaged in talks with the despised outgoing military regime.

In order for the Radicals to build upon their toehold on power, the economy would have to be turned around in a hurry. An IMF-style plan for stabilization was avoided at first, to placate the powerful trade unions and keep the population in support of the government's policies.[19]

But why would Economy Minister Bernardo Grinspun's avoiding an IMF stabilization program be a popular move? Because, to quote Werner Baer, an IMF plan:

> consisted of a combination of: currency devaluation, reduction of import controls, credit restrictions, reduction of government subsidies on basic consumer goods (including fuel and basic foods), higher public utility prices (electricity, telephone, urban transportation, etc.), higher taxes,

> wage repression, reductions of public employment, reduction of government investments, etc.[20]

Just imagining the public wrath over an electricity rate hike alone would give any elected government (perhaps even some unelected ones) pause, so not surprisingly Argentina tried to avoid acquiescing to the IMF's demands.

There was no way to continue down this path, however. Argentina could no longer make payments on the principal of its foreign debt in early 1984, and before the year was out announced a suspension of interest payments as well. While it was popular to defy the IMF, the country was in need of a bailout and no foreign bank would extend any credit unless the IMF recommended it. Alfonsin, in September 1984, was forced to sign on to a standby agreement.

By February 1985 Grinspun and the Central Bank Governor, Enrique Garcia Vasquez had resigned as a protest against the IMF stabilization recommendations and were replaced respectively by Juan Sorrouille and Jose Luis Machinea.

Grinspun and Vasquez were not the only people opposed to the IMF agreement. The trade unions (most of whose loyalties were with the opposition Peronists) were out to torpedo the pact and force the government to give in to their demands for a wage increase and additional government spending.

Alfonsin's difficulties with the trade unions went back to his effort to change the existing labor laws and usurp some of the unions' power. So not only were the unions against the IMF agreement for philosophical reasons, they opposed it out of malice as well. In any event, they succeeded in getting the wage increases and government spending they desired and ruined the agreement.

It was not long after the first wage increases were promised that the austerity program Argentina was attempting to implement collapsed and the IMF withdrew its support and suspended all new loans.

The stop and go gradualist policies of the past had to be abandoned and replaced with a dramatic, new approach that would stop Argentina's spiraling inflation dead in its tracks and impress upon the IMF and foreign banks that Buenos Aires was serious about stabilization and deserving of desperately needed funds. The government decided on a shock treatment.

<u>The Government Shift Policies.</u> Recognizing that the gradualist approach was not working, but not wanting to institute a standard IMF program (i.e. a monetarist solution), Sorrouille assembled a team of advisors (Machinea, Mario Brodherson, Adolfo Canitrot, and Roberto Frenkel) to construct a program modeled after the Weimar Republic's success in combating hyperinflation.[21] From the beginning, avoiding hyperinflation was the group's main

concern and not the total elimination of inflation.[22] After studying the plans enacted by the Germans in the 1930s, the group concluded that their earlier attempts at stabilization had failed for three reasons.

1. "[A]n inability to understand the structural problems of the Argentine economy."[23] There were four main structural problems: "supply inelasticities, relative price oscillations, thn generalization of indexation, and the endogenous character of part of the fiscal deficit and monetary behavior."[24]

Supply inelasticities, such as the example of the supply of food used above, not only helped fuel inflation but caused the second structural problem of relative price oscillations. With supplies of goods unresponsive to changes in price and all parties conscious of their eroding real income, a "fight for shares", as Werner Baer calls it, ensued. With everyone trying to raise their prices before the other guy did, something called "inertial inflation" was generated.[25] Inertial inflation, many economists felt, was purely psychological and made matters seem much worse than they actually were.

The generalization of indexation was a form of "pay-back" for the government, which had in effect been caught in its own trap. Before indexation, governments could use inflation as an invisible tax, devaluing money right out of a workers paycheck (true, there were periodic wage increases, but in the interim the government stood to make a siphoned-off fortune). In addition, anyone who bought bonds got bilked since by the time it matured it was worth less than the initial investment.[26]

After indexation was introduced, wages and bonds were adjusted for inflation and the government was left holding the bag (and forced to increase the deficit).

As far as fiscal and monetary policies being endogenously caused by inflation, consider the tax evasion example above. In Argentina, only 32.7 percent of registered taxpayers filed returns "and of those only 13 percent paid taxes."[27] The Olivera-Tanzi effect was in full bloom there. In other words, the higher inflation went, the longer people would evade paying taxes and the greater the deficit would become. Monetary cause maintains that anytime a government devalues its currency, it causes its foreign and local debt to become more expensive to service and thus increases the deficit.

2. "[T]he incompleteness of the policy measures previously adopted."[28] Sorrouille and his team of experts were convinced that in the face of inertial inflation, "traditional austerity programs would result in severe recessions without stopping inflation"[29] (since the inflation was psychological). In addition to IMF-style wage restrictions, a price freeze would be required as well.

3. "[I]nconsistency in implementing such policies."[30] Trade unions and the temptation to inflate the currency were most often what broke the will of the government. This time they would have to resist the pressure and avoid previous stop-and-go experiences with economic reforms.

How could the government institute policies that would succeed where others had failed for the above three reasons?

One way would be to build a consensus between government, business and labor; the other would be to just spring a plan on the country by executive order with no prior warnings or consultations.

Alfonsin chose the surprise announcement route since reaching a consensus with the intransigent labor movement bordered on fantasy and any pre-announced price freeze would lead to eleventh-hour price spirals. Of course, going it alone meant that no other group had invested political capital in the program and therefore could decry it at the first indication it was at risk of going sour, but it also meant that the Radical party would not have to share the credit. The 1985 elections were coming up and if the program was successful the UCR could build on its absolute majority in the lower house of Congress, perhaps eventually even taking the Senate and wresting some governorships from the Peronists. A lot was riding on it.

The first austerity measures were enacted by the government a few days before the main body of the plan. It was the equivalent of taking advantage of inside information at a stock exchange.

The coming price freeze would not completely eliminate the inflation so the currency would over time become overvalued. To pre-empt this, the government devalued the peso. In addition, many public utility rates were raised to adjust for inflation before the freeze locked them into unprofitability. Private companies were not so lucky.

Announcement. The Austral Plan was announced on June 14, 1985 and would attack inflation on three fronts: fiscal policy, monetary policy and wage and price policy.

Fiscal Policy. This was a standard monetarist deficit reduction plan aimed at reducing a revenue shortfall which had reached 12.8 percent of GNP by 1984.[31]

It called for a revamping of Argentina's thoroughly inadequate tax collection system[32] and included tougher penalties for tax cheats. Tax collection would also be aided by the lower inflation brought on by the Austral Plan because any windfall from putting off paying taxes would evaporate. Recently increased public utility rates were raised again, as well as taxes on international trade.

In addition to all the tax increases, spending cuts would be needed to bring down the deficit. The Austral

Plan called for cessation of government hiring and firings of people with patronage jobs.

Monetary Policy. Here is where the economic planners got creative. Some elements were still standard fare but represented a break with the past for Argentina.

The government swore off inflating the currency as a means of financing deficits. This measure is at the heart of monetarist theory and had never been adhered to by Argentina. From June 14, 1985 on, whatever deficit was left over after the fiscal policies were enacted would be financed with foreign borrowing.

Monetarism has no provisions for inertial inflation, however, so Sorrouille's team broke with tradition and enacted programs based on structuralism to fight it. Inertial inflation, it was felt, was a psychological phenomenon so something that broke the inflationary mindset was needed.

First, a new currency, the austral was introduced to impress upon the populace that this was a real change in direction. The austral's exchange rate was fixed at $1.25 with 1 austral equalling 1000 pesos.

Secondly, in an effort to keep from penalizing businesses and to quell the demands for new rounds of price increases, "deindexation" was introduced. Contracts concluding after June 14 had expected 30 percent inflation to continue and it was figured into the price. With inflation now expected to be zero, inflation compensation needed to be taken out.

Finally interest rate ceilings were imposed. Only time deposits and fixed rate credits would have their original interest rates respected. All other transactions' interest rates were dropped to accommodate lower inflation and prevent bank failures.

Wage and Price Policy. Monetarists frequently recommended wage restrictions but never a price freeze. The IMF traditionally opposed price freezes, too.

Nevertheless, the Austral Plan called for a wage and price freeze, including the exchange rate (just devalued) and the prices of public services (which had just been increased) at June 12 levels. Only a few seasonal goods were allowed to fluctuate.

While wages were boosted 23 percent, it was to make up for the purchasing power that had been lost to inflation during the first 14 days of June. government made it clear though, that this would be the last increase for some time.

Some parts ordinary, some extraordinary (a new currency, deindexation, wage and price freezes), the Austral Plan was introduced to the IMF in the hopes that it would convince them to recommend extending credit to Argentina. Credit which was critical since it was what Argentina planned to pay its residual deficit with. A letter of intent was signed stating that the IMF would issue a $1.2 billion loan if the U.S. issue done for $470 million. In return, Argentina would continue to run trade surpluses (that would be used to pay back its foreign debt) and try to keep inflation down.

Implementation and Performance. The Austral Plan ran its course over 2 years 3 months and in five distinct phases: initial shock, relaxation, money crunch, "Australito" and liberalization.

Initial Shock (June 1985-March 1986). At first the Austral Plan was a rousing success. Inflation dropped form 30.5 percent in June to 6 percent in July and 3 percent in August.

Even inertial inflation seemed broken. Confidence in the austral was reflected by the increases in bank deposits and a decrease in spending. Stable prices seemed to agree with everyone.[33]

But inflation was still present to some degree and, ironically, one reason for it was the new found confidence in the economy . There was a large inflow of Argentine capital from abroad. Inflation was also fueled by a reduction in bank reserve requirements; freeing up the banks to loan out more money into the system and keep interest rates down by helping satisfy the increasing demand for money.

In addition, government activities were contributing to inflation. Some public enterprises could not make the interest payments on their external debt so the Central Bank made the payments in their behalf. While not an outright violation of the government pledge not to print money, it was still a violation in spirit.[34] The Central Bank had also refinanced half the interest payments on the foreign debt and rediscounted commercial bank paper (mostly to local governments).[35]

Not surprisingly, the Central Bank and government deficits were larger than expected. The fiscal deficit was supposed to decline to 2.5 percent of GNP in 1985 and while increased tax revenues (from 17.17 percent GNP to 21.56 and 23.03 percent by the third and fourth quarters) helped bring third and fourth quarter deficits down around 2.1 and 2.4 percent of GNP respectively, the deficit for 1985 ended up being 6.3 percent.[36] Still, this was not bad considering the deficit was nearly 13 percent of GNP the previous year.

The government did manage to run a surplus in trade though, to the tune of $2 billion from July to December 1985. The problem with this was that it was not due to growth in exports, rather it was a drop in imports due to recession.[37]

Recession had, in fact, persisted. But the conquest of inflation had impressed the voters immensely and the

Radicals were rewarded with gains at the polls. More importantly, their chief rivals, the Peronists, had slipped. If they could keep the program rolling, they would be able to capture several governorships in 1987.

Things were looking up for the economy. By early 1986 it looked as if a recovery might be on the horizon, in spite of still-high interest rates. The government had a problem: should they break with the program and increase the money supply for the sake of reducing interest rates, even at the risk of rekindling inflation?[38]

This risk was a large one because there was already a great deal of inflationary pressure. One reason was because of the effect the price freeze had had on the market. Those businesses which had increased prices just before the Austral Plan were (in a sense) winners, because they were able to charge the actual price of their product. Businesses which had been getting ready to adjust for inflation were losers because now, on account of the freeze, they could not raise prices and were destined to lose money for the duration.[39]

The government had been aware of this result which is why utility rates were increased before the freeze. Also, since they hoped to avoid problems with the population, wages had been adjusted. By 1986, however, unions were beginning to demand wage increases to compensate for the low-level inflation (20.2 percent) that had persisted since

June 1985. Businesses caught by the price freeze wanted reindexation of prices.

Another reason for inflationary pressure was the increase in the prices of seasonal goods. People were demanding compensation not only for this but because of the widespread belief that many people were getting raises under the table (which seemed to run against the population's "zero-sum mentality").[40]

The initial shock had gotten great results, but the freeze was never meant to last forever and the point of diminishing returns was being reached in many phases of the operation.

Had inertial inflation truly been beaten? Despite increased savings and other evidence that it had, there was still the prevailing inertial attitude in society that anyone else's gain was your loss. Lifting the freeze would give the structuralists their answer.

Relaxation (April 1986-August 1986). Not only were interest rates high, inflation had left the austral overvalued in the world market (since its exchange rate had been fixed) and had led to a decline in the trade surplus.

So on April 4, 1986 the government announced the end of shock treatment and the start of growth with "controlled rates of inflation."[41]

Fiscal Policy: Loss of revenue due to the Olivera-Tanzi effect had peaked at 3.9 percent of the GNP in 1985 and was on the way down.[42] Still, the deficit persisted and prices charged by public enterprises were increased to help close the gap (some had been losing money, too).

Monetary Policy. The government continued to abstain from issuing money to finance the deficit, but there was a growth in the money supply of 5 percent a month in an effort to bring down interest rates. Also the government devalued the austral by 3.75 percent to help trade.[43]

Wage and Price Policy. Wages for state employees were increased by 5 percent for the second quarter and 8.5 percent for private employees. Indexation was reinstituted but the economic planners, in an effort to thwart inertial inflation, set price adjustments at longer intervals.

While easy money did help lower interest rates and promote economic growth (6.1 percent and 11.7 percent growth in the second and third quarters of 1986, respectively), it also combined with indexation to fuel inflation. Things were quickly getting out of control.

Indexation was driving wages beyond the government's original guidelines. Government gave in to union demands for a 30 percent wage increase in the final quarter of 1986. Such policies, in effect, caused an inertial inflation explosion.

Monetary growth and indexation had proved to be a deadly combination, but it was not too late to tighten the money supply, abandon indexation and correct the mistakes made. The question was, did government have the political courage to do it? Half-actions would not help.

The Monetary Crunch (September 1986-February 1987). The government's return to tight money failed to reduce inflation because continuing indexation was fueling the inertial side.

Indexation had been revamped and was comprised of three groups of goods and services: Wage goods, indexed every 45 days; Industrial goods, indexed every month; and Non-state supplied services whose prices were left free.[44]

Fiscal Policy. The government abandoned its commitment not to finance the deficit through money supply increases (it used "some sterilized deposits that the public sector held in banks"[45]) and inflation was a 7 percent by February 1987.

Monetary Policy. Since a trade surplus was vital, the exchange rate was perfectly indexed while. . .

Wage and Price Policy. Wage goods and industrial goods were "underindexed," that is adjusted below the inflation rate in an effort to slow the inertial complement. Restrictive money policy was what the government hoped would sufficiently brake the prices of non-state supported services.

Whatever economic activity had been starting earlier in the year seemed to be fading. In December 1986, industrial activity had slipped to August 1985 levels and led to an increased shortfall in tax revenues. Once inflation and indexation had returned, so did the Olivera-Tanzi effect. Tax cheats (despite a renewed effort to collect taxes) combined with a decline in economic activity to produce a fiscal deficit of 9 percent of GNP. The Austral Plan was on the brink of total failure.

"Australito" (February 1987-June 1987). A poor man's Austral Plan, the Australito, as it came to be known, was announced on February 25, 1987 and enacted February 25.

The program was to not only institute wage and price freezes as a means of combating inertial inflation but structural reforms as well. It was the right idea but very late in coming.[46]

Fiscal Policy. With the fiscal deficit at 9 percent of GNP it was obvious that the Treasury needed to raise revenues. So public utility rates were increased by 2 percent and gas and tobacco prices were boosted by 15 percent.

Monetary Policy. The austral was devalued by 7 percent and another 2 percent in both May and June of 1987.

Wage and Price Policy. The price freeze covered everything except fruits and vegetables (which had special controls). Wages were frozen, but within a certain range. A private employee's salary was flexible within a range 11 percent, while 9 percent was the range for public employees. This "flexible freeze" was to remain in effect until July 1.

While these policies temporarily suppressed inertial inflation, a series of structural reforms were to go after the inflation's source.

First, the state sector was going to be downsized and streamlined. Some 20 percent of employees were to be laid off over a three year period. A Directorate of Public Enterprises was to determine what alternatives would best help to implement reform. Several agencies were to be restructured, eliminated or combined with others. Some state enterprise monopolies (such as the telephone company and the state airlines) were to be privatized.

Capital market reform was intended to help break the mindset of avoiding long-term gestation projects. To solve this problem meant deregulating the banks and expanding the stock market, which would serve as an alternative source of capital. Hopefully, this would lead to a break from "the inflationary process and. . .speculation typical of a closed economy."[47]

To open the economy also meant integrating with the world market. This would be done with industrial infrastructure modernization (progressive tariff reductions and credit-lines for the high tech sector to buy better equipment) and signing protocols with other countries. Hopefully, outside competition would force Argentine industry to become more productive or disappear.

In the four-month freeze period, however, inflation was not quelled. At 5.2 percent, the quarterly rate of inflation was nearly twice the 3 percent that the government had hoped for and the deficit was 6.5 percent rather than the projected 4.6 percent. Tax revenues remained disappointing and public enterprises were in constant need of subsidies.[48]

Before, Alfonsin's economic failures had been somewhat forgiven because he was shielded by his popular stand against the former military regime. For the first time, a military, right up to the junta, was held accountable for its actions while in power.

But public clamor for retribution had agitated the military to the point of outbreaks of rebellion. When Alfonsin appeared in one such rebellion to accede to the military officers' demands it hurt his image a great deal. Worse yet, other rebellions followed.

Unions had been rebellious all along. There were 13 general strikes in Alfonsin's 6 years as President.

With gubernatorial and congressional elections coming up, things could not have been much worse for the Radicals.

Australito had failed outright and one of the reasons for it was a lack of public confidence.

In an effort to curry favor with the unions, Carlos Alderete (a Peronist) was named Labor Minister.[49] This was another reason for Australito's failure: Alderete's appointment led to friction in the Cabinet and opposition to wage suppression. Australito had started as a desperate attempt to give voters the impression that the government had the economy under control, but it ended up as almost total failure. Radical popularity kept sliding.

Liberalization (July 1987-September 1987). After the demise of the Australito, the Radical Party was in serious trouble at the polls.

With the freeze lifted, Sorrouille launched a salvo of various economic measures ranging from the privatization of the petrochemical industry to the elimination of wheat tariffs.

Structural reforms dealing with restructuring the state sector were shelved. It was an election year and state employees each had a vote, so rather than lay anyone off the government raised transport fees and the gas tax by 10 percent to make up for shortfalls. State enterprise debts (foreign debts in particular) were assumed by the Treasury.

The Radicals continued efforts to win over the unions, but to no avail. Even with Alderete's appointment, unions were not won over. The Administration's handling of the economy did not impress labor and they were also displeased by new wage-bargaining rules that had been issued as a decree law.

After the September 8 defeat of the Radicals, Sorrouille and his team of "best and brightest" Ph.D.'s tendered their resignations. To paraphrase Luigi Manzetti and Marco Dell Aquilla, although Alfonsin refused to accept the resignations it was in effect the end of the Austral Plan.[50]

The Cruzado Plan

Background. In Brazil, inertial inflation was believed to be the main cause of the country's woes. One Brazilian, Francisco Lopes, had been studying the problem of inertial inflation and writing on it since the late seventies. He was convinced that inertial forces were the economic culprit and it would take a "heterodox shock" to purge the system.

At about the same time Persio Arida and Andre Lara-Resende were coming forward with a proposal to fight inflation with an indexed currency. The "Larida" proposal suggested introducing second currency, whose value would be indexed monthly vis-a-vis the cruzeiro. To do this, the new currency would have a value fixed with the Obrigocoes Readjustaveis do Tesouro Nacional (ORTN) (the Brazilian

Treasury's purchasing power bond unit). If Lopes' price freeze is incorporated into this plan then once the public had gained confidence in the new currency (and the psychological inflationary cycle was broken), the freeze could be lifted and the cruzeiro would be done away with; replaced completely by the new money.

While the Larida proposal found broad support among structuralists some did dissent. Simonsen, Modiano and Carneiro felt that if there was an outbreak of high inflation during conversion from cruzeiros, public confidence in the new currency would be damaged since it would lose some of its value (which would lead to reindexation and start the inflationary cycle).[51]

After the Brazilian New Republic took office in March 1985, it appeared that the economy was on its way to an indexed currency proposal. "Price, exchange rates and financial asset nominal adjustments became increasingly linked to monthly variations in the ORTN. . . . The proposals for a new wage policy included. . .adjustments every month according to the variation of the ORTN."[52]

Inflation was at 12 percent a month when President Sarney had assumed office and with drought pushing agricultural prices up, it looked by January 1986 as if inflation may hit 400-500 percent when these increases reached the consumer level. Sarney's support in his own political party had never been strong and now it was threatening to collapse. He needed to do something.[53]

Structuralist advocates of the heterodox stabilization plan managed to wrest Sarney's ear from the monetarists, who advocated the orthodox route to stability (the structuralist's success may have been due to the fact that the Austral Plan was enjoying its greatest success around that time).

Announcement. The Cruzado Plan was announced by Sarney on February 28, 1986, in a television address to the nation. Decree Law 2283[54] included the following:

Fiscal Policy. The fiscal policy had actually already been announced in December 1985. It divided income tax refunds into four installments in an effort to let government hold the money longer. Yet the withholdings were cut to give workers more take-home pay.

Measures were taken to reduce inflationary erosion of government revenues. Large companies had to produce six-month income statements.

The exchange rate policy had been established in March 1985, allowing for daily minidevaluations. Brazil's economy was growing and had a good position externally with the world market. Under the Cruzado Plan, the exchange rate was fixed and the cruzado somewhat undervalued.[55]

Monetary Policy. The Austral Plan had shown the Cruzado planners that there would be a pronounced increase in the demand for money and willingness to save, so flexibility was built in to accommodate for this and keep any abrupt changes in economic activity (like higher interest rates) under control.

Of course, the increased demand for money would be due to the introduction of a new currency, the cruzado (worth 1000 cruzeiros) which would replace the cruzeiro. The cruzado was the centerpiece of the plan and was fixed at Cz $13.84 to US $1.00.

Also, government replaced index-linked government obligations with a new, non-indexed "Central Bank Bill."

Wage and Price Policy. According to Werner Baer, this part of the plan alone was enough to kill it.

Besides a general price freeze, the Cruzado Plan called for wages to be set at the last six-months' average plus 8 percent and 15 percent for minimum wage. In addition, wages were to automatically increase each time the Consumer Price Index accumulated 20 percent from the last adjustment.

Indexation of contracts of less than one year (except for savings bonds) were prohibited and any existing contracts were deindexed. The conversion rate would assume a monthly inflation rate for the cruzeiro of 14 percent and index it out when converting to cruzados just as the

Austral Plan deindexed contracts by the 30 percent monthly rate inflation stood at when it was introduced.[56]

The prohibition of indexation in contracts of less than a year probably had to do with the fact that in Argentina, allowing indexation to continue with short-term contracts had helped fuel inertial inflation's resurgence.[57]

Implementation and Performance. The Cruzado Plan was much more short-lived than the Austral Plan, lasting only 1 year and 3 months and falling into three phases: Disinflation, Cruzadinho and Cruzado II.

Disinflation (March 1986-June 1986). One thing that set Brazil apart from other heterodox experiments was that the economy was expanding at the time the program was instituted. Industrial activity, which had been at 72 percent of capacity in 1984 was up to 77 percent. By the end of 1986 almost 60 percent of industry was working at over 90 percent of capacity.[58]

Why? A consumption boom brought on by the government's economic policies was overheating the economy. The surge in spending was the result of a real increase in wages coupled with a price freeze, lower interest rates, lower income tax withholdings and pent-up demand from the recent recession.

Like in Argentina under the Austral Plan, Brazil's businesses were divided into economic winners and losers due to the price freeze. Combining this with increased consumer demand led to shortages, the most pronounced being in meat, milk and cars. With a crucial election coming up that would pick the state governments and, more importantly, the constituent congress the government went about trying to alleviate these difficulties (trying not to undermine the overall plan). Milk was subsidized and meat imported (since the shortage had been exacerbated by seasonal decline). Problems still persisted with meat producers and in the end did damage to the public's confidence in the government.

New automobiles were frozen at a price so relatively cheap that used ones were more expensive. Some elements of the public sector were caught with their prices frozen below costs, too (electricity was hit worst and needed subsidies). Government economists felt it might be time to at least readjust prices, but the upcoming election made that a political impossibility.[59]

Tampering with the Cruzado Plan made the government apprehensive. It was an extremely popular program for many reasons, but the main two were that:

1. It had brought about "zero inflation."[60] The drop from 22 percent in February 1986 to -1 percent in March was dramatic. Deflation

continued into April (-.6 percent) and when prices did go up in May and June it was only slightly (.3 percent and .5 percent, respectively). Zero inflation was perceived as evidence of stability.[61]

2. Not only the public's perception of inflation, but of itself as well was being taken into consideration by the government. After 21 years of military rule, everyone wanted to participate in the new democratic government. Many took it upon themselves to act as the "price police" and make certain no one violated the price freeze.[62]

Sarney wanted to stretch this "era of good feelings" as far as he could; hopefully until after the elections. For the time being, the Cruzado Plan overstaffed agencies and large subsidy programs were to remain untouched, or disturbed as little as possible.[63]

<u>Cruzadinho (July 1986-October 1986)</u>. The numbers in July 1986 looked worrisome. The economy was experiencing excessive growth.

To quote Eduardo M. Modiano:

> Consumer purchases increased 22.8 percent in the first six months of 1986 with respect to the same period in the previous year. The production of consumer durables increased 33.2 percent during the previous twelve months. The open unemployment rate declined from 4.4

> percent in March to 3.8 percent, and real wages increased approximately 12 percent from the end of February.[64]

The government was loathe to take action before the November elections, but it was decided that some accumulated problems needed to be addressed.

Cruzadinho was a pretty "timid fiscal package" aimed at "increasing investment" and "dampening consumption."[65] First, a 30 percent "forced loan" was placed on new cars and 28 percent for gasoline. These loans were to be paid back after three years but the second measure of the Cruzadinho were 25 percent "forced loans" on international travel (international airplane tickets and foreign exchange for travel) that were nonrefundable.

These loans were intended to encourage investment because they were "returned to the consumers of these products in the form of equity shares in the National Development Fund."[66] This fund was intended to be a combination of public and private money used to invest in various development projects (known as the Plano de Metas) with the goal of helping foster 7 percent GNP growth.

These measures did little to promote public confidence for two reasons. Revenues for the Plano de Metas fell short of what was required and made the whole scheme look like a back door approach to fund the burgeoning public debt. Also, since the prices of items affected by forced loans went up, the government removed them from the basket of goods that was used to measure the CPI and thus avoid triggering the automatic wage increase mechanism.

What was more important than what the Cruzadinho addressed was what it did not address. Prices remained frozen despite the distress it was causing some sectors of the economy. The price freeze "losers" had been willing to be good citizens for a few months, but after 5 months (the Cruzadinho was announced July 24, 1986) they were growing impatient.[67]

Businesses began to come up with clever ways around the freeze "by offering new products," cheating on the contents of packages, and requiring 'side payments' or 'premiums.'"[68] People were becoming aware of these breaches in the freeze and began to anticipate its lifting. Consequently (and ironically) this led to a surge in consumption with everyone hoping to take full advantage o the freeze before its end and defeating the purpose of the Cruzadinho.[69]

In addition, the Cruzadinho did not address the external accounts problem. Brazil had had trade surpluses since 1983, running about $1 billion a month and accumulating an $11 billion foreign exchange reserve. The Cruzado Plan began with an undervalued cruzado. Now, due to inflation, it was considered increasingly overvalued. Much like the end of the price freeze, businessmen began anticipating a devaluation to correct the situation. No exporters wanted to get caught holding the bag so exports began to slow (called an "export strike" by some) and in some cases exporters began selling in the more lucrative domestic market (shortages in the domestic market also fueled imports.) Some felt that a number of exporters engaged in such activities as a protest aimed at making the government devalue the cruzado.

But government resisted, fearing devaluation would lead to inflationary pressure and create an inflation--devaluation--inflation cycle. From September 1986 to October 1986 export revenue went from $2.1 billion to $1.3 billion; forcing the government to grudgingly devalue the cruzado by 1.8 percent. Many traders felt that the currency was still overvalued by 10 percent and government wold have to remedy this sooner or later; an attitude which led to even more export slowdowns and increased imports.

The 10 percent figure was just an educated guess since no one really knew what the actual rate of inflation was. What they did know was that with certain goods like automobiles excluded, it was nowhere near what the government claimed (all this confusion to avoid the 20 percent wage trigger). And that was how things would stay until after November 15. The government did not have the stomach for tampering with the economy any further before the election. Sarney had resolved to take his revenue shortfall lumps for the time being and deal with the harsh realities later.

Cruzado II (November 1986-May 1987). Now that the government party had won the election, they felt it was time to take action. Inflation was not as much of a concern to them as the growing public debt so a series of measures aimed at increasing government revenues by 4 percent of GDP at the expense of inflation, called the Cruzado II, was introduced one week after their victory.

Even though they had just been returned to power, the ruling party still had an aversion to raising direct taxes, so indirect ones were boosted instead. Automobiles went up by 80 percent, cigarettes by 120 percent, alcohol went up by 100 percent, sugar by 60 percent. In the public sector postal tariffs went up by 80 percent, gasoline 60 percent and public utility rates (telephone and electricity specifically) were upped 35 percent. While all these measures led to an inflationary shock, anticipated increases in the near future for steel and milk (a 100 percent boost on all dairy products) only made matters more volatile.[70]

In addition to cars, cigarettes and beverages were to remain out of the CPI equation (the government hoped to shave 10 points off of the monthly inflation rate with this action). But the public clamor was so great that the government recanted. Government was still determined to avoid the wage trigger at least partially. It was announced that while automatic wage increases were going to be triggered in December (due to the inflationary explosion), "[t]rigger adjustments would be limited to 20 percent with the residual carried over to the next trigger."[71]

Even without taking the "side payments" businesses were charging into account, inflation had taken off. It had been 3.3 percent in November,but by December it was 7.3 percent. Government seemed aimless on the subject of the still ongoing price freeze. While it was not officially lifted, businesses took advantage of a loophole in Cruzado II to relieve the building inflationary pressure and "the overpricing that had become a general disguised practice started to be disclosed and revealed by the price collection agencies in January 1987."[72] As a result inflation rose to 16.8 percent in january, 13.9 percent in February, 14 in March, 19 in April and 26 percent in May. Inflation was on its way to well over 1000 percent annually.

The first wage trigger adjustment was added at the end of January, but inflation was moving so quickly it did little other than restore some purchasing power lost that month.

In February 1987, (February 27 in fact, the day before the Plan's first anniversary) under threats by industry to disobey price regulations,the freeze was lifted[73] and indexation, the supposed culprit of inertial inflation, was reinstituted.

To quote Modiano:

> [T]he reindexation of the economy, initiated in November, was completed with the introduction of monthly nominal corrections. The fixed periodicities for adjustments of the old cruzeiro contracts were all renewed except for labor contracts [which already had the wage trigger]. . . . Consequently the economy became more heavily indexed than on the last days of the cruzeiro, which meant that the high rates of inflation. . .would continue to increase, but at a much faster pace.[74]

Inflation was so steep that short term interest rates were at 2000 percent per annum. As inflation neared the "hyper" level indexation of loans began to wreak havoc on borrowers.

To quote Baer:

> Because inflation is not neutral (particular prices rise at different rates), borrowers have no assurance that their prices and incomes will rise as much as the average price level on which the indexation is based. . . . In any event, interest rates rose high enough to cause calamitous problems for many enterprises, especially those set up in the euphoria following the Cruzado Plan. Bankruptcy proceedings reached record levels throughout Brazil in the first half of 1987.[75]

Businesses were also hurt by foreign exchange difficulties. A midídevaluation was announced in an effort to bring the overvalued cruzado more in line with reality.

Overconsumption in 1986 coupled with a lack of foreign currency had led to a shortage of raw materials and intermediate products.

The balance of trade problems were not showing any signs of letting up and were ultimately leading to a foreign currency crisis. Domestically, the market was in disarray due to the abrupt lifting of the price freeze and uncertainty over the government's future plans. So faced with an imminent economic slowdown, a disorganized domestic market and a foreign currency reserve crisis, Brazil announced a "technical moratorium" on interest payments on the foreign debt. The government did this in an effort to shore up political support, help alleviate foreign currency losses and to get the banks of negotiate.[76] In the end Brazil accepted a series of IMF missions[77] as a condition for an earlier rescheduling of its debt payments. The Cruzado Plan had reached its inauspicious ending.

Conclusions

One thing the Cruzado and Austral plans had in common was that they were both unmitigated disasters. But why?

I am still less than convinced that inertial inflation even exists. Werner Baer spoke of how structuralists felt inertial inflation would continue under an orthodox stabilization program (and in the face of the recession such a program would cause)[78] and point to continuing inflationary pressure in Argentina and Brazil after tightening the money supply.

But wait, there is a time laq between expanding the money supply and the inflation that ensues. Likewise, there is a time lag between tightening monetary growth and inflation's decline. Milton Friedman placed this time lag at about two years for a low inflation economy and for "countries like. . .Brazil. . .or Argentina that have experienced much higher and more variable rates of inflation, the lag is only a few months."[79]

The initial shocks in Argentina and Brazil may not have given the economy enough time to purge their systems. Brazil never actually declared any targets for monetary policy, and its disinflation period only lasted five months before the inflationary Cruzadinho and Cruzado II phases. So how does this prove anything? In addition, Argentina's tight money still amounted to 7-7.5 percent growth in the first quarter of 1986.[80] In fairness, there was an increasing demand for money at that time but a lot of this new money was due to the Central Bank's surreptitious financing of the public sector's debts (pure inflation). The initial shock in Argentina also took place during an economic slowdown; so it would probably take a while for inflation to cycle itself out and the nine and a half months the economy was given simply may not have been enough time.

Policy Crossroads. Both Argentina and Brazil were also faced with a crucial decision at the end of their plans' first phase. For Argentina (to quote Manzetti and Dell 'Aquilla):

> The first option was to use the achievements of the stabilization as a springboard to decisively being inflation close to U.S.-European levels through tight monetary, fiscal and wage policies. The second option envisaged a flexible approach, in which policies were to limit the rate of inflation to moderate levels, without necessarily making commitments as to the actual policies to be adopted.[81]

As for Brazil it was a choice between devaluing the cruzado, lifting the freeze and taking their chances at the polls or stay put, run up huge debts and distort the economy for the sake of political expediency.[82] Both Argentina and Brazil chose the popular route.

They probably did not even really have a choice. For the obvious reason that it would be political suicide and another is the tremendous difficulty any country would have combating inflation in the face of the tremendous debt. Kiguel said some felt it was next to impossible.[83]

Inflation and Price Controls. But supposing it could be done, should they have chosen tight money and devaluations?

I believe that the first thing that needed to be done was, in fact, tightening the money supply even at the risk of recession. Price freezes make no economic sense to me and I feel they should have been removed. Consider a pot of water on a stove. If you turn on a fire under it, the water heats; cause and effect (monetary expansion heats up inflation too). The higher the flame, the hotter the water gets (just like the fire and water, monetary expansion and inflation are positively related). So once the water has come to a boil (or the economy experiences hyperinflation), what does one do: turn down the fire or put a lid on the pot? Putting a lid on the pot does nothing for the cause of the problem and makes the effect into a dangerously explosive pressure cooker just like price controls subvert the market forces of an economy to its detriment.

Carrying this comparison a little further, even turning the fire completely off will not cause the water to stop boiling immediately. Does this mean that there is "inertial boiling" going on or just residual heat from the fire?

Should the fire be turned completely off; that is to say should a treasury stop expanding the money supply altogether? Even the most strident monetarists would say no. Instead, the growth in the money supply should try to match the growth in the GNP and make for zero inflation.[8] Zero money growth would mean deflation and recession (no fire means cold water, too).

Problems and Solutions: Debt. But recession would probably be inevitable due to the debt crisis. Sorrouille was on the right track when he was streamlining the government. Some of the money wasted on deadwood could have been used to help pay the debt. It is too bad that a lot of that debt was incurred for the sake of being squandered by military regimes, too. Investment in infrastructure or industry would have helped generate capital.

Probably the most important question has two parts: why did they take out such huge loans and why did the banks loan it to them to begin with? I could write another paper on that subject but in short I think that the foreign banks were awash in petrodollars in the 1970's and needed to loan them to someone. In addition the interest rates on these loans were fixed (indirectly) to the U.S. prime rate so it was when the prime rate shot up to 21 percent in 1980 that these debts suddenly became unmanageably.[85]

In this case, it would appear the overeager banks are as much to blame as the debtor nations. I also find it ironic that the United States is currently upset at the German Bundesbank's high interest rates (to fight German inflation) when ten years ago we stiff-armed South America with a high prime rate to help reduce double-digit inflation here at home.

As Werner Baer has argued, perhaps the U.S. and other developed countries should have assumed the debt from the banks and given South America a 10-year grace period on interest payments and a 25-year grace period on principal payments to allow their economies to develop to where they could afford to pay.

I wonder if South America would go for this. The last time a South American country's debt was assumed by a foreign government was in 1902. Venezuela had refused to pay English, German and Italian banks which led to their respective governments assuming their debts, sending gunboats to Venezuela and shelling the place until it found the money.[86]

Adam Smith's Revenge. Werner Baer mentioned repeatedly in The Brazilian Economy that the real income wage increase alone would have killed the Cruzado Plan. The Austral Plan had no such raise yet it failed, too.

In the end what it came down to was the dubious existence of inertial inflation, which constituted the cornerstone of heterodox theory (although I must admit the Larida proposal was intriguing and the Latin American economy needs structural changes); the dubious wisdom of price controls, which only served to kill market signals and showed that hiding inflation beneath price controls is not a cure; the dubious commitment of the government to fiscal discipline, which was evidenced by its back-door methods of expanding the money supply and unwillingness to make tough, politically unpopular decisions; and finally the dubious possibility that a team of technocrats can actually plan an economy's recovery.

The market is such a sophisticated mechanism that even King Solomon or an army of King Solomons could not imitate it. The total failure of heterodox theory makes for a victory for monetarists everywhere. And somewhere, Adam Smith is smiling.

ENDNOTES

1. Manzetti, Luigi and Marco Dell'Aquila, "Economic Stabilization in Argentina: The Austral Plan," the Journal of Latin American Studies, May 1988, pg. 2.

2. Ibid, pg. 4.

3. Grunwald, Joseph, "Invisible Hands in Inflation and Growth," Werner Baer and Isaac Kerstenetzky (eds.), Inflation and Growth in Latin America (New Haven, CT: Yale University Press, 1964), pg. 290.

4. Manzetti and Dell'Aquila, pg. 3.

5. Ibid, pg. 5.

6. Grunwald, pg. 291.

7. Cole, Julio Harold, Latin American Inflation, (New York: Praeger, 1987), pg. 27.

8. The terms latifundio and minifundio come from: Furtado, Celso, Economic Development in Latin America (New York: Cambridge University Press, 1976), pg. 75. "latifundio weaknesses" comes from: Sheahan, John, Patterns of Development in Latin America (Princeton, NJ: Princeton University Press, 1987), pg. 108. "minifundio weaknesses" comes from: Hunter, John M. and James W. Foley, Economic Problems of Latin America, (Boston: Houghton Mifflin Company, 1975), pg. 87.

9. Modiano, Eduardo M., "The Cruzado First Attempt: The Brazilian Stabilization Program of February 1986," Michael Bruno, Guido Di Tella, Rudiger Dornbusch, Stanley Fischer (ed.), Inflation Stabilization (Cambridge, MA: the MIT Press, 1988), pg. 218.

10. Grunwald, pg. 292.

11. Sheahan, pg. 109.

12. Baer, Werner, Social Aspects of Latin American Inflations (Buenos Aires: Instituto Torcuato Di Tella, 1990), pg. 4.

13. Friedman, Milton, Free to Choose (New York: Avon Books, 1979), pg. 253.

14. Baer, Werner, The Brazilian Economy, (New York: Praeger Publishers, 1989), pg. 267.

15. Hunter and Foley, pg. 276 and 283.

16. Griffiths, Brian, Inflation, Economy and Society, (Worthing, Sussex, England: Institute of Economic Affairs, 1972), pg. 23.

17. Manzetti and Dell'Aquila, pg. 18.

18. Canavese, Alfredo J. and Guido Di Tella, "Inflation Stabilization or Hyperinflation Avoidance? The Case of the Austral Plan in Argentina: 1985-87," Michael Bruno, Guido Di Tella, Rudiger Durnbusch and Stanley Fischer (ed.), Inflation Stabilization, (Cambridge, MA: The MIT Press, 1988), pg. 155.

19. Manzetti and Dell'Aquila, pp. 2-3.

20. Baer, Social Aspects, pg. 17.

21. Manzetti and Dell'Aquila, pp. 4-5.

22. Canavese and Di Tella, pg. 153.

23. Manzetti and Dell'Aquila, pg. 5.

24. Canavese and Di Tella, pg. 154.

25. Baer, Brazilian Economy, pg. 165.

26. Friedman, Milton, Tyranny of the Status Quo, (San Diego: Harcourt Brace Jovanovich, 1984), pg. 28.

27. Manzetti and Dell'Aquila, pg. 15.

28. Ibid, pg. 5.

29. Baer, Social Aspects, pg. 19.

30. Manzetti and Dell'Aquila, pg. 5.

31. Canavese and Di Tella, pg. 156.

32. Baer, Social Aspects, pg. 5.

33. Manzetti and Dell'Aquila, pp. 5-9, and Canavese and Di Tella, pp. 156-157.

34. Manzetti and Dell'Aquila, pg. 10; quote from Canavese and Di Tella, pg. 163.

35. Canavese and Di Tella, pg. 160.

36. Deficit numbers came from: Manzetti and Dell'Aquila, pp. 9-10.
Tax revenue numbers came from:
Kiguel, Miguel A., "Inflation in Argentina: Stop and go since the Austral plan," World Development, August 1988, pg. 971.

37. Surplus numbers came from: Canavese and Di Tella, pp. 159-160.
Recession came from:
Manzetti and Dell'Aquila, pg. 10.

38. Canavese and Di Tella, pp. 160-162.

39. Baer, Social Aspects, pg. 20.

40. Manzetti and Dell'Aquila, pp. 9-12.

41. Canavese and Di Tella, pg. 163.

42. Ibid, pg. 171.

43. Ibid, pg. 163.

44. Manzetti and Dell'Aquila, pg. 13, Canavese and Di Tella, pp. 163-165.

45. Canavese and Di Tella, pg. 166.

46. Manzetti and Dell'Aquila, pg. 15-17.
Canavese and Di Tella, pg. 165-166.

47. Manzetti and Dell'Aquila, pp. 17-18.

48. Ibid, pg. 19.

49. Kiguel, pg. 981.

50. Manzetti and Dell'Aquila, pp. 20-21.

51. Baer, Brazilian Economy, pp. 166-167.
Mediano, pp. 115-216 and pp. 220-222.

52. Modiano, pg. 221.

53. Nelson, Joan M. (ed.), Economic Crisis and Policy Choice, (Princeton, NJ: Princeton University Press, 1990), pg. 83.
Inflation numbers came from:
Modiano, pg. 220.

54. Baer, *Brazilian Economy*, pp. 167-168.

55. Modiano, pp. 230-233.

56. Baer, *Brazilian Economy*, pp. 168-182.

57. Canavese and Di Tella, pg. 161.

58. Brazil's expanding economy comes from:
Sheahan, pg. 120.
Industrial Activity numbers come from:
Baer, *Brazilian Economy*, pg. 175.

59. Modiano, pp 234-235.
Baer, *Brazilian Economy*, pg. 177.

60. Baer, *Brazilian Economy*, pg. 173.

61. Ibid, pg. 169.

62. Modiano, pg. 233.

63. Baer, *Brazilian Economy*, pg. 177.

64. Modiano, pg. 236.

65. "increasing investment" comes from:
Baer, *Brazilian Economy*, pg. 185.
"timid package" and "dampening consumption" come from:
Modiano, pg. 236.

66. Fund quote comes from:
Baer, *Brazilian Economy*, pg. 185.

67. Baer, *Social Aspects*, pg. 20.
Modiano, pg. 236.

68. Baer, *Brazilian Economy*, pg. 173.

69. Modiano, pg. 237.

70. Baer, *Brazilian Economy*, pg. 182-183.
Modiano, pg. 237-238.

71. Modiano, pg. 238.

72. Ibid, pg. 239.

73. Nelson, pg. 85.

74. Modiano, pg. 240.

75. Baer, Brazilian Economy, pg. 186.

76. Modiano, pp. 237, 239-240.

77. Baer, Brazilian Economy, pg. 188.

78. Baer, Social Aspects, pg 19.

79. Friedman, Milton, Bright Promises, Dismal Performance (San Diego: Harcourt Brace Jovanovich, 1983), pg. 199.

80. Canavese and Di Tella, pg. 163.

81. Manzetti and Dell'Aquila, pg. 12.

82. Baer, Brazilian Economy, p. 173.

83. Kiguel, pg. 983 quoted Canavese and Di Tella, pg. 166.

84. Friedman, Bright Promises, pg. 15.

85. Baer, Brazilian Economy, pg. 105.

86. Lorant, Stefan, The Life and Times of Theodore Roosevelt (New York: Doubleday, 195[illegible]), pg. 402.

*Some parts of this section came from my Spring 1992 Econ 352 notes (Professor: Werner Baer).

The examples of misallocated resources (land and non-perishable goods) and borrowing off state enterprises to fight inflation come form the March 25, 1992 lecture and April 27, 1992 lectures, respectively.

The facts that Central Banks were subordinate in Latin America and that tax evasion is not penalized severely came from March 25, 1992 lecture notes.

Also, the proposal that deficit spending will pay for itself in increased tax revenues from new industries and infrastructures came from Professor Baer paraphrasing Austrian Economist Joseph Schumpeter during the February 12, 1992 lecture.

Bibliography

Baer, Werner, The Brazilian Economy. (New York: Praeger Publishers, 1989).

Baer. Werner, Social Aspects of Latin American Inflation. (Buenos Aires: Instituto Torcuato Di Tella, 1990).

Baer, Werner and Isaac Kerstenetzky (eds.), Inflation and Growth in Latin America. (New Haven, CT: Yale University Press, 1964).

Bruno, Michael, Guido Di Tella, Rudiger Dornbusch and Stanley Fischer (eds.), Inflation Stabilization. (Cambridge, MA: The MIT Press, 1988).

Cole, Julio Harold, Latin American Inflation, (New York: Praeger, 1987).

Friedman, Milton, Bright Promises, Dismal Performance. (San Diego: Harcourt Brace Jovanovich, 1983).

Friedman, Milton, Free to Choose. (New York: Avon Books, 1979).

Friedman, Milton, Tyranny of the Status Quo. (San Diego: Harcourt Brace Jovanovich, 1984).

Furtado, celso, Economic Development of Latin America, (New York: Cambridge University Press, 1976).

Hunter, John M. and James W. Foley, Economic Problems of Latin America. (Boston: Houghton Mifflin Company, 1975).

Kiguel, Miguel A., "Inflation in Argentina: Stop and go since the Austral plan," World Development, August 1991.

Lorant, Stefan, The Life and Times of Theodore Roosevelt. (New York: Doubleday, 1959).

Manzetti, Luigi and Marco Dell'Aquila, "Economic Stabilization in Argentina: The Austral Plan," Journal of Latin American Studies, May 1988.

Nelson, Joan M., Economic Crisis and Policy Choice. (Princeton, NJ: Princeton University Press, 1990).

Robbins, Lord (ed.), Inflation, Economy and Society, (Worthing, Sussex, England: Institute of Economic Affairs, 1972).

Sheahan, John, Patterns of Development in Latin America. (Princeton, NJ: Princeton University Press, 1987).