

**ESTABLISHING CREDIBILITY: THE ROLE OF FOREIGN ADVISORS**  
**IN CHILE'S 1955-58 STABILIZATION PROGRAM**

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## I. Introduction

The adoption of stabilization programs is usually a painful process, both politically and economically. History is replete with instances where, even at the light of obvious and flagrant macroeconomics disequilibria, the implementation of stabilization programs is significantly delayed. Why do policymakers and/or politicians prefer to live with growing inflationary pressures and implement price and other forms of highly inefficient controls, instead of tackling the roots of macroeconomic imbalances? Is the prolongation of inflation the consequence of mistaken views on the mechanics of fiscal deficits and money creation, or is it the unavoidable result of the political game? Why after months of apparent political stalemate, all of a sudden stabilization programs that closely resemble others proposed earlier on are adopted? These questions are at the heart of the political economy of stabilization and inflationary finance.<sup>1</sup> In recent years the analysis of these issues has attained new interest, as a number of authors have applied the tools of game theory to the study of macroeconomic policymaking. Although important theoretical progress has been achieved in the explanation of some of these phenomena, the amount of empirical and historical work on the subject is still rather limited.<sup>2</sup>

The purpose of this paper is to investigate an important historical stabilization episode in Chile, one of the countries with the longest history of chronic inflation in the world. Starting in the late 19th century, Chile suffered recurrent and increasingly frequent inflationary outbursts. Of the many stabilization programs adopted to tackle this problem, the 1955-58 package implemented with the advice of the U.S. consulting firm of Klein-Saks, is, undoubtedly, one of the most interesting ones.<sup>3</sup> Its interest resides on a number of factors: first, at the time the initial measures were implemented inflation had reached the extremely high annual level (for that time) of 85% (see Table 1). Second, the policies adopted contradicted the newly dominant orthodoxy in Latin America that

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<sup>1</sup>Latin American debates on inflation and stabilization have traditionally emphasized political economy angles. It is only recently, however, that these issues have begun to be tackled using a formal economics framework.

<sup>2</sup> For a masterful presentation of recent advances on the political economy of macroeconomics policy making see Drazen (2000).

<sup>3</sup>It is certainly a stabilization attempt that has attracted considerable attention from academic economists. See, for example, Hirshman (1963), Felix (1960), Edwards (1986).

associated inflation to *structural* problems.<sup>4</sup> Third, the Klein-Saks program took place in a period of acute political confrontation. Fourth, the episode is interesting because after what was considered to be an initial success -- inflation declined to 38% in 1956, and was further reduced to 17% in 1957 -- the program failed to achieve durable price stability (see Figure 1). Finally, what makes this episode particularly noteworthy is that the program proposed by the Klein-Saks mission was very similar to anti-inflationary plans that had been previously elaborated by several government agencies, including the Ministry of Finance and the Central Bank, in the period 1954-55. However, while these were rejected by Congress, most (but not all) of the Mission's program was approved by Congress. This characteristic of the episodes raises the issue of the role of foreign advisors in the design (and implementation) of economic policy.

In this paper I argue that the foreign advisors of the Klein-Saks Mission gave *initial* credibility to the stabilization program launched in 1955. These foreign advisors played the role of independent, non-partisan, technocratic arbiters. It was precisely because they were foreigners that they could raise above the political fray, and suggest a specific program, whose main components were rapidly approved by a highly divided Congress. The fact that the program was very similar to one proposed earlier by the government -- and that was rejected by Congress -- underscores the view that, while locals are suspect of being excessively partisan, foreigners are often (but not always) seen as independent policy brokers. But providing *initial credibility* was not enough to ensure success. In spite of supporting trade reform, foreign exchange rate reform, and the de-indexation of wages, Congress failed to act decisively on the fiscal front. Consequently the fiscal imbalances that had plagued Chile for a long time were reduced, but not eliminated. In 1957 a sharp drop in the international price of copper -- the country's main export -- resulted in a major decline in fiscal revenue and in an increase in the fiscal deficit. The Mission recommended a series of belt-tightening measures, but politicians had had enough of orthodoxy. No adjustment was made, and inflationary expectations once again shifted for the worse. By October of 1958 the Mission had left the country, and an opportunity for achieving stability had been lost.

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<sup>4</sup>On the structuralist view of inflation see, for example, Sunkel (1958).

The rest of the paper is organized as follows: In Section II I provide a broad historical background on the Ibañez del Campo presidency in Chile during 1952-1958. In Section III I present the analytical framework for interpreting the Klein-Saks episode. This framework is based on the modern theory of credibility, and makes use of concepts such as war of attrition and external enforcers. Section IV focuses on Chile's inflationary experience. Here I discuss in great detail economic conditions in the early 1950's and I focus on the mechanisms behind the country's increasing rate of inflation. I discuss President Ibañez del Campo original populist program, and I deal with two failed stabilization programs implemented during the early 1950s. In Section V, and VI and VII I deal with the Klein-Saks Mission itself. In Section V I discuss in detail the program proposed by the Mission, focusing on two of its main components: wage de-indexation and the reform of the exchange rate system. In Section VI I deal with the role played by the Klein-Saks Mission in the stabilization effort launched in late 1955. In this part of the paper I concentrate on three inter-related issues: First, I analyze whether the diagnosis of inflation causes, and the actual policy proposals made by the Mission differed significantly from previous analyses on the causes of inflation. That is, I investigate whether from a *purely technical* perspective the Mission provided new approaches and insights. Second, I explore the extent to which the Mission's program was credible; more specifically, I investigate the presence of the external advisors provided a pre-commitment technology. And third, I use congressional records and correspondence files to analyze the political process -- including the formation of alliances and coalitions -- that led in early 1956 to the adoption of the so-called "stabilization package". In Section VII I use time series econometric techniques to analyze whether the work Mission's Stabilization Program was credible to the public. Finally, in Section VIII I present some concluding remarks.

## **II. Historical Background**

In 1952 former army general Carlos Ibañez del Campo was elected president of Chile by a significant margin.<sup>5</sup> His campaign had been carried out on the basis of a "new

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<sup>5</sup>Ibañez del Campo obtained 47% of the votes. The right-wing candidate Arturo Matte got 28%, while the radical Pedro Enrique Alfonso obtained 20%. The socialist candidate, and future president, Salvador Allende obtained less than 6%.

beginning” -- he was called by his supporters “the General of Hope” (*El General de la Esperanza*) -- and as a reaction against the political establishment. He was supported by a loosely knit coalition of populists, nationalists and socialists. The general himself, however, was not a member of any political party, and from the very beginning of his campaign stated his intentions of being highly independent from the parties. His program’s rhetoric was decisively populist and had an anti-establishment content. The presence of socialists in the coalition was not window dressing; they participated in the first Ibañez del Campo cabinet with three ministers, including finance. As time progressed however, it became apparent that Ibañez del Campo personalistic approach to government was increasingly incompatible with the socialist program. In October of 1953, less than a year after Ibañez del Campo had taken office, the socialist party abandoned the governing coalition.<sup>6</sup>

Carlos Ibañez del Campo inherited a country with serious macroeconomic disequilibria stemming mostly from significant fiscal imbalances financed by the Central Bank. During the first two years of the Ibañez del Campo presidency no serious attempt at fighting inflation was made. Quite the contrary, influenced by a combination of populist views and an approach to monetary policy based on the “real bills doctrine,” monetary policy became increasingly lax, generating a rapid acceleration of inflation. The propagation of price increases was greatly helped by the existence of a broad-based wage indexation system that mandated wage adjustments by the amount of accumulated past inflation.<sup>7</sup>

After a failed stabilization attempt, in 1955 inflation surged towards the 100% level. Politically, Ibañez del Campo became increasingly isolated as both the right (conservative and liberal), the centrist Radical Party and the left stepped up their opposition tactics. Labor unrest was mounting and a generalized political dissatisfaction was apparent. It was at this juncture of Chile’s political and economic history that the

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<sup>6</sup>See, for example, Ampuero (1969) and Jobet (1971).

<sup>7</sup>This process of backward looking indexation was informally initiated in the late 1950s and legalized through Law 10,343 in mid-1952.

men of the Klein-Saks mission arrived in Chile.<sup>8</sup> Their task was to tame inflation, attain stability, and help set the stage for a recovery program.

The emphasis in this paper is not on the actual policies and results of the Klein-Saks mission, but rather on the political process that led to the hiring of these consultants and to the (at least partial) adoption of their policies. That is, I am interested in understanding what as the role of the external advisors, and, in particular, whether their advice helped the Ibañez del campo administration solve its credibility and commitment problem. I also investigate whether the fact that the Mission was hired affected how different players perceived the costs of delaying the resolution of the inflationary pressures.

### **III. The Basic Analytics of the Political Economy of Inflation and Stabilization**

Since the early 1990s there has been renewed interest in analyzing the political economy dimensions of macroeconomics policymaking. Many of these new theoretical developments have formally used game theory to describe the way in which different actors interplay in the policymaking process. The purpose of this section is to provide an analytical framework for the historical analysis that follows. I briefly review some of the most important features of the theoretical literature on inflation, placing particular emphasis on stabilization programs.

Generally speaking, political economy models of macroeconomic policymaking stress the distributional impact of both inflation and stabilization. According to most models, the existence of distributional and political conflict fuels the inflationary process. There are many possible channels through which political conflict may result in higher inflation. Cuikerman, Edwards and Tabellini (1991), for instance, have suggested a model where politicians have different preferences and act strategically. This strategic interaction results in an inefficient tax system, and in the inflationary finance of the fiscal deficit. In this type of models, a higher degree of political instability will result in higher

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<sup>8</sup>The Mission was hired in July 1955; the five-man team arrived in Santiago in September. Their first memorandum was delivered to the president in November. The mission was led by Mr. Preston Carter, a man with ample practical experience both in the private and government sector. His colorful Spanish and straightforward manners rapidly established him as a trusted advisor. See Correa Prieto (1962).

seignorage and higher inflation; a greater degree of political polarization – measured as the difference in political parties’ preferences --, will also result in higher inflation.

Interestingly, this approach not only explains the origin of inflation, but it also provides insights about the timing of the stabilization. In this framework, stabilizing the price level means changing the political status-quo. This, in turn, may generate new disputes among political groups about the share of the burden of the fiscal adjustment. These political disputes are likely to take the form of a “war of attrition,” during which all the conflicting groups wait for one of them to finally give up. The group that “blinks first” is forced to bear a disproportionate burden of the adjustment.<sup>9</sup> This “war of attrition” results in a delay of the stabilization. A particularly interesting feature of these models is that this delay takes place even in situations where there is general agreement among conflicting groups about the overall form of the adjustment policies needed to stop inflationary pressures. Of course, postponing the stabilization will usually increase the size of the adjustment effort needed, and thus exacerbates the political conflict.<sup>10</sup>

Existing theoretical models based on the war of attrition concept have been quite general, and have not always specified the precise mechanism (or mechanisms) through which the conflict finally is resolved. What makes one of the players retreat? Why at some point the perceived cost of waiting exceeds the benefit? What is the role of political negotiations? Can a third party, or mediator, help bring the conflict to a faster end? Addressing these issues at a theoretical level is well beyond the scope of this paper. However, in discussing and interpreting the Klein-Saks episode I consider some (possible) complications of the straightforward war of attrition model.

A somewhat different, although not contradictory, approach to inflation and stabilization is based on the role of institutions and credibility. After the rational expectations revolution, many authors emphasized the importance of expectations during stabilization episodes. A number of them, and most notably Sargent, concluded that in order to put an end to any inflationary process, a “credible” change of the monetary and

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<sup>9</sup>For more details on this outcome, see Alesina and Drazen (1989), and Drazen (2000).

<sup>10</sup>For an early study on the effects of a postponed adjustment, see, Edwards and Montiel (1990). See also Drazen (2000).

fiscal *regimes* was needed.<sup>11</sup> To the extent that stabilization is not credible -- that is, the stabilization program is not expected to achieve the intended results -- the costs of adjustment escalate and the probability of a successful stabilization becomes smaller.<sup>12</sup> This view led naturally to look for ways of modifying and influencing expectations during a stabilization program. The role of “policy announcements” has been analyzed as possible means of affecting inflationary expectations. In this connection, however, it has been stressed that in order for these announcements to be “credible” -- and thus to actually affect expectations -- it is necessary for the government to be able to precommit itself to a given course of action. This, of course, turns out to be difficult to do, since societies many times lack the institutional setup required for government to credibly precommit itself.

Credibility-based models have also emphasized the role of *reputation* as a substitute for precommitment. According to this approach the desire of governments to preserve their reputation -- or even, possibly, to improve it -- provides them with a constrained set of policy options.<sup>13</sup> Some authors have suggested that expectations can be coordinated and that credibility can be established if it is supported by an external institution, such as the League of Nations in the 1920s and the International Monetary Fund after 1950.<sup>14</sup> The reason is that by granting its "seal of approval" to a stabilization plan, an external institution enhances the confidence in the program. In principle, this "seal of approval" is independent of the financing that the external institution can provide.<sup>15</sup> In fact, the presence of external involvement can endow the stabilizing government with a "commitment technology" that gives an assurance that the announced program will indeed be fully carried out.

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<sup>11</sup>This was the message of Sargent (1983,1986).

<sup>12</sup>Along similar lines see Dornbusch (1991).

<sup>13</sup>See Persson and Tabellini (1990, 2000).

<sup>14</sup>See Sachs (1989), Edwards (1989) and Santaella (1993).

<sup>15</sup>Accounts of the support given by external credits and loans to stabilizing countries are in the League of Nations (1946), Dornbusch and Fischer (1986) and Persson and Tabellini (2000). On the IMF as a provider of a “seal of approval” see Boughton (2002, 2003) and Vreeland (2003).



#### IV. Inflation in the Early 1950s in Chile

In this section I provide some background information on the Chilean inflationary process before the arrival of the Klein-Saks Mission. I concentrate on the path leading to very rapid inflation in 1954-55 and I discuss the characteristics of the most important stabilization attempts undertaken during the years prior to the arrival of the Mission.

##### *IV.1 The End of the "Radical" Presidencies*

During the years 1938 to 1952 the centrist Radical Party was the dominant political force in Chile. Throughout this period the country underwent a rapid industrialization process based on import substitution policies, and experienced a fairly rapid rate of growth.<sup>16</sup> Gabriel Gonzalez-Videla, the third Radical President, came into power in 1946 supported by a coalition of Radicals, Socialists, and Communists. The Communist Party, however, had a short stay in office: in 1948 the so-called "Law of Defense of Democracy," which outlawed the Communist Party was enacted. For the rest of its period, Gonzalez-Videla governed with the support of the rightist liberal and conservative parties.

During the Gonzalez-Videla presidency, Chile experienced increasingly large macroeconomic imbalances that led to rapid inflation, low savings and investment and recurrent external sector difficulties. Wages were under continuous pressure, monetary policy was dominated by supporters of the "real bills doctrine" that believed that money creation channeled towards industry was not inflationary, and public finances became extremely fragile. In spite of the fact that after the expulsion of the communists, the Ministry of Finance was controlled by austere conservative politicians, the rate of money creation was extremely high. For instance, between 1945 and 1951 the stock of high-powered money increased at a rate that exceeded 30% per year.<sup>17</sup>

These inflationary pressures resulted in two important macroeconomic developments that shaped many of the policies that were to be taken in the next ten years: first, in order to deal with external sector imbalances and to fight tendencies towards real exchange rate overvaluation, a system of multiple nominal exchange rates was

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<sup>16</sup>See, for instance, Mamalakis (1976).

<sup>17</sup> The two most important Finance Ministers were Jorge Alessandri (who in 1958 became President of the Republic) and Carlos Vial. As Felix (1960), they did not always agree on the causes behind the country's rapidly increasing rate of inflation.

developed. While during the first year of the Gabriel Gonzalez-Videla there were three official exchange rates ranging from 37 to 31 pesos per dollar, by 1952 the number of official rates had increased to five with their range going from 19.37 to 60 pesos per U.S. dollar (see Table 2).<sup>18</sup> However, in spite of the adoption of this discriminatory exchange rate system and of the imposition of generalized controls and trade restrictions, the external sector was under continuous pressure during this period. Not surprisingly, the foreign exchange parallel (or black) market premium increased from a level of around 30% in 1946 to almost 400% towards the end of the Gonzalez-Videla administration (see Figure 2). As a result of this situation, increasing amounts of resources left the country in the form of capital flight.<sup>19</sup>

The second important macroeconomic development of this period was the institutionalization of a wage rate indexation mechanism. As inflation increased, a 1941 law mandating the yearly adjustment of minimum wages for white collar workers became a more and more important piece of the existing economic legislation. Although this law did not specify all the details of this adjustment process -- it did not say, for example, in what percentage wages should be adjusted relative to past inflation -- actual mandated wage increases became de facto fully linked to past inflation. Moreover, in some years (1949-50, for instance) the wage adjustment decreed by the government greatly exceeded accumulated inflation during the preceding year.<sup>20</sup> These automatic wage adjustments fed back into prices, generating a high self-feeding process that was constantly validated by the Central Bank. The process became more entrenched in late 1952, when a law mandating an automatic backward-looking wage adjustment for public sector wages of 90% of past inflation was enacted. Initially this legislation applied only to public servants. By 1954, however, its reach had increased greatly; approximately half a million public and private sector workers' salaries were adjusted according to the mechanism determined by this law.

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<sup>18</sup>These rates were "official" in the sense of being sanctioned by the authorities. However, one of them only received the technical name of "official exchange rate." What made things more complicated was that there were also a number of "mixed" rates, corresponding to weighted averages of the six "official" rates.

<sup>19</sup>See, for example, the United Nation's 1951 Technical Assistance report on Chile's inflation (p. 3). This report was written by a team of foreign experts led by Erik Lindahl from the University of Upsala.

<sup>20</sup>See Hirshman (1963). The Chilean indexation scheme of this period is described, in a comparative setting, in Sen Gupta (1958).

The combination of this indexation mechanism with the increasing importance of the parallel market for foreign exchange resulted in a highly inertial inflationary process, as well as important distortions in the external sector. The contribution of the indexation mechanism to inflation was understood early on by many (but not all) Chilean economists. In fact, in the period 1949-55 the elimination, or at least partial control, of this indexation procedure was at the center of policy discussion and was considered an essential component of most stabilization attempts. In 1949 the government requested two foreign advisory reports on the causes of inflation and on possible ways to stop it. Although these two reports -- by a United Nations team and by the staff of the International Monetary Fund -- differed in many respects, they agreed that an elimination of the inflationary pressure would require dealing with wage adjustments.<sup>21</sup>

#### ***IV.2 Ibañez del Campo's Populist Program***

In 1952 Carlos Ibañez del Campo became the candidate of the disillusioned. The 72 year old retired army general captured voters' frustration and disappointment with the traditional political parties. Not being himself a member of a political party, he was supported by a loose coalition of personal followers (*Ibañistas*), nationalists (*Partido Agrario Laboristas*, PAL) and Socialists. From early on the *Agrario Laboristas* became the backbone of the coalition, helping determine the main social, foreign and economic policies.<sup>22</sup>

Although during the presidential campaign Ibañez del Campo was (deliberately) vague regarding the details of his economic program, his discourse had a clear populist tone.<sup>23</sup> He promised to eliminate inflation, to increase the standard of living, to create a strong government-owned bank, and to put an end to corruption. The *Partido Agrario Laborista*, however, had a more clearly defined economic program that explicitly called for increased subsidized credit for productive purposes; higher public investment in

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<sup>21</sup>These two reports differed, however, in their emphasis. While the Fund considered the elimination of indexation as the center of a stabilization program, the U.N. proposal revolved around a price freeze and an obligatory savings scheme.

<sup>22</sup> On the PAL, see Garay Vera (1990).

<sup>23</sup> Interestingly enough, and contrary to other populist experiences in Latin America, in addition to courting the urban masses, Ibañez del Campo sought (and obtained) support among the rural voters.

transportation and other forms of infrastructure, modernization of agriculture, the encouragement of exports, and the creation of a heavy industry.<sup>24</sup>

After taking power on November, 1952, Ibañez del Campo named Juan B. Rosetti, a socialist, to the Ministry of Finance. In spite of the government's statements that defeating inflation was a high priority, during the period 1952-55 the fiscal deficit and money creation reached record proportions.<sup>25</sup> Wage increases, higher transfers, and growing bank credit were rapidly feeding higher price increases. Between December of 1951 and December of 1954 the Central Bank credit to the government increased by 430% (see Figure 3 on monetary growth).

In 1953, Minister of Finance Felipe Herrera, a socialist who later became the president of the *Interamerican Development Bank*, put together a stabilization program based on a devaluation of the peso, credit controls, and higher income taxes. No effort however was made to put an end to the wage indexation scheme. Quite on the contrary, the devaluation -- most commercial transactions became subject to a 110 pesos per dollar rate -- was accompanied by a 15% increase in the so-called *Family-Allowance*, a per head bonus paid to each worker. Moreover, the program was not fully implemented; after an intense debate, Congress refused to increase taxes, with inflation continuing its rapid acceleration.

Instead of following up on the Herrera program and trying to work out a political solution to the impasse, President Ibañez del Campo decided to alter the course of economic policy. Herrera was replaced by an Ibañez del Campo supporter of clear populist inclinations, who immediately eliminated credit controls, increased government expenditures and wage adjustments.<sup>26</sup> Undoubtedly Ibañez del Campo's own personality affected the nature of the inflationary process. His sudden changes of heart, his political gyrations and his stubborn independence from political and economic advisors, more often than not added fuel to inflation.

A second stabilization attempt took place in mid-1954 under the leadership of Jorge Prat, a nationalist politician that had been a member of the conservative party until

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<sup>24</sup> On the PAL economic program see Garay Vera (1990).

<sup>25</sup> French-Davis (1973) points out that the rate of money expansion during this period had only been exceeded during the Socialist Republic of 1932.

<sup>26</sup> See Hirshman (1963) and French-Davis (1973) on this episode.

1947. This program was even broader and more ambitious than that proposed by Felipe Herrera. Its main components included:

- government austerity through lower expenditures;
- a new devaluation;
- higher taxes;
- the reestablishment of credit controls;
- reforming the system of wage indexation by reducing the extent of the adjustment to 60% of accumulated past inflation;
- increasing the coverage of the minimum wage;
- imposing a forced profits reinvestment policy on corporations.

This program -- which was known as the “Program of Economic Rectification” (*Programa de Rectificación Económica*) -- received some initial political support by Congress, and some of its components including the devaluation and a partial adjustment of taxes were undertaken. Once again, however, the complete program was not approved by Congress, and once again taxes and wages were at the heart of the political impasse: the right, the radicals and the left voted against tax increases, and the wage de-indexation rules. At that point, political increased significantly, with the opposition parties stepping up their anti-government campaign. In December, Congress stripped the government of executive privileges and put an end to a state of emergency imposed earlier that year. A succession of Finance Ministers went in and out of office in rapid succession.<sup>27</sup> The leftist opposition rapidly began to gather momentum, and major labor conflicts ensued. A number of major strikes took place, with political dissatisfaction becoming ever more apparent. The government was clearly on the defensive.

In January 1955, under the fifth Minister of Finance of the Ibañez del Campo administration, a 60% generalized wage adjustment was granted. In that month inflation reached an annual rate of almost 57% and the premium in the parallel market for foreign exchange surpassed the 70% mark, almost doubling from its level in November of 1954 when the Prat devaluation was engineered.

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<sup>27</sup> A drastic decline in the price of copper, made things more complicated, Zahler (1978). See Ffrench-Davis (1973).

As the year 1955 began, the political situation became increasingly fragile, with a group of Ibañez del Campo supporters -- including the so-called “grey wolves” (*lobos grises*) -- discussing with some high military officers -- the “Straight Line” (*Linea Recta*) group -- the possibility of staging a coup that would have dissolved Congress, while retaining Ibañez del Campo as the head of state. The extent of the plot, and the vulnerability of the democratic system, became starkly clear when Senator Guillermo Izquierdo, the Chairman of the *Partido Agrario Laborista*, recognized that he himself had been involved in discussions with the military from “Straight Line” group.<sup>28</sup>

#### V. **The Klein-Saks Mission: Diagnosis and Policy Recommendations**

On July of 1955 the government of Chile hired the Klein-Saks consulting firm to evaluate the economic conditions of the country and to provide a set of recommendations regarding anti-inflationary policy.<sup>29</sup> Two months later the five men mission arrived in Santiago for what was originally supposed to be a six-month visit. Things, however, were not so simple; the Mission worked continuously in Chile until September of 1958. By then, however, inflation had not been tamed. In October of 1958 the 12 months rate of inflation was 16%, significantly higher than what the Mission had expected when it had arrived in Chile three years earlier.<sup>30</sup> But the worst was yet to come. By December 1958 inflation had climbed to 33%, and by mid-1959 it was almost 45%. By then the Klein-Saks Mission had been added to a long list of Chile’s failed stabilization programs.

In this section I discuss the diagnosis made by the Mission, as well as its original policy recommendations. I also analyze the political discussion that surrounded the first year of the Mission’s work. Although the main interest of this paper is on the *adoption and implementation* of the Mission’s program, in subsection V.2 I briefly deal with the final phases of the program, and I discuss the reasons behind its eventual failure.

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<sup>28</sup>See Garay Vera (1990, p. 178).

<sup>29</sup> Government leaders debated intensively on who could provide the best advice. The candidates included Dr. Dagmar Schacht, of Nazi fame, and the French economist Pierre Mendes-France. A number of elements seem to have determined the selection of the Klein-Saks group, including the fact that this was a U.S. firm and that it had help implementing a successful (or so perceived) program in Peru in 1949.

<sup>30</sup> According to the Mission’s program, price stability would have been achieved by 1958-59. See French-Davis (1973, p. 27).

## V.1 *Diagnosis*

Approximately 45 days after its arrival, on November 19, 1955 the Mission delivered its first policy memorandum to President Ibañez del Campo, stating its overall view on the economic conditions, and sketching some of its most important policy recommendations. The Mission's diagnosis of Chile's inflationary pressures revolved around four basic areas: (1) fiscal deficit, (2) monetary expansion, (3) exchange rate policy, and (4) wage rate policy.

The Mission forcefully argued that the state of government finances and, in particular, the extremely high fiscal deficit was at the heart of the inflationary process. It was suggested that this problem was to be tackled by a combination of higher revenues, to be obtained via the combination of a tax reform that would include stiff penalties for tax evasion and payment delays, and reduced expenditures. Among the specific measures recommended to cut down public expenditures the Mission included the “suppression of foreign travel by public functionaries,” the “elimination, if possible, of subsidies to public railways, maritime freight, airlines, buses, and electricity”, and the reduction (again if possible) “of the acquisition of arms and weapons.”<sup>31</sup>

The Mission also pointed out that while fiscal laxity was the main cause of inflation, price increases themselves had helped to further weaken the efficiency of the tax system:<sup>32</sup>

“The entire tax system had become distorted, with the incidence of taxes being far different from the intentions of the legislators. All taxes fixed in numbers of peso and *all taxes paid with a time lag had a lesser incidence than had been intended ... As a consequence tax revenue had become insufficient to finance even a constant level of real expenditures...*” (Klein & Saks, 1958, p. 3) [emphasis added].

Of course, the statement in italics means that the Mission recognized what in time has come to be known as the Olivera-Tanzi effect: lagged tax collection in an inflationary environment can greatly erode tax revenues. Consequently, an important

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<sup>31</sup>Letter from the Mission to the President of the Republic dated November 19, 1955.

<sup>32</sup>Most letters and memoranda from the Mission to the government were in Spanish. This and other quotes correspond to my own translation.

recommendation of the Mission was to replace specific taxes for ad valorem ones and to reduce the tax collection lag.

With respect to credit policy, the Mission argued that excessive money creation, mostly (but not exclusively) devoted to finance government expenditures constituted an important element fueling inflation. Their monetary analysis was traditional and strictly based on the quantity theory of money. For instance, in evaluating Chile's capacity to conduct noninflationary monetary creation a Mission report stated:<sup>33</sup>

“Considering that the Chilean economy is fully employed, that population grows at a 1.6% annual rate and that national income has rarely exceeded 3.5%, it is not justifiable to expend liquidity at a rate exceeding 5 to 6% per annum.”

And the letter went on to say:

“It is, thus, not surprising that with an increase in monetary means of almost 70% in 1955, price increases had reached almost 80%.”

In terms of policy, the Mission suggested imposing quantitative credit limits to the banking system, and urged the Central Bank to make use of the control attributions that a new charter had provided in 1953. Additionally, it recommended that the Central Bank charged an interest rate close to the market rate for its own loans and other operations. Much of the Mission's early work on monetary policy consisted of persuading the public, and especially some prominent group of industrialists, that money creation devoted to increasing credit to industry was still inflationary. In fact, as was suggested earlier, at the time Chilean entrepreneurs were highly influenced by the real bills doctrine and argued that it was crucial to distinguish between “speculative” and “productive” credit.

With respect to exchange policy, the Mission argued that under a situation of multiple exchange rates and severe overvaluation, as the one prevailing in Chile in late 1955, the rest of the anti-inflationary measures would be self-defeating. Without introducing rapid and substantial corrective measures in the foreign sector it was clear

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<sup>33</sup>Letter to the Minister of Finance dated December 27, 1955.



that the public would continue to speculate against the peso, introducing a dangerous instability into the financial and banking sectors.

In a letter to the Minister of Finance dated January 16, 1956, the Mission argued that it was urgent to implement in the *very short run* a reform of the exchange rate system:

“An anti-inflationary program that excludes a reform of the exchange rate system will, at best, generate a temporary and short run reduction of inflation. It would fail, however, to provide the country with a solid base for future economic growth and development...”

In April of 1956, and after the IMF had granted its approval, a new exchange rate system consisting of a single *fluctuating exchange rate* for commercial transactions and a freely floating rate for capital movements was adopted. In fact, this dual floating exchange rate system was vintage Klein. In 1949, Julius Klein, one of the principal partners of the consulting firm had advised the government of Peru recommending, among other things, the adoption of a dual rate fluctuating system. This regime lasted in Peru from November 1949 to December 1954.<sup>34</sup>

Initially it was thought that the Central Bank would occasionally intervene in the foreign exchange market in order to smooth excessive fluctuations. In fact, with the aid of the IMF the government created a U.S. \$70 million stabilization fund for this purpose. Rather quickly, however, the government began to intervene in the market a direct way, by de facto pegging the commercial rate. By 1957 the exchange rate became a serious area of disagreement between the government and the Mission. While the latter argued that new world and national conditions required a substantial depreciation of the peso, the former refused to do it on the grounds that it would increase inflation.

The exchange system reform of 1956 was accompanied by a series of measures geared at organizing the control of international trade systems. The most important elements of the new foreign trade regime were the existence of a list of forbidden commodities which could not be imported into the country and the implementation of a

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<sup>34</sup>The Peruvian program can be found in Klein (1949). See also Edwards (1983).

system of previous import deposits whereby, at the time of requiring an import license, importers had to make a deposit (in the Central Bank) equivalent to a percentage of the merchandise to be imported.

Although the Mission's reports recognized from the beginning that the anti-inflationary policy should be seen as a *package* with multiple interrelated components, they also stressed that limiting the extent of *wage indexation* was the most important short run measure. This position was based on both economic and strategic considerations. First, the Mission recognized that the automatic wage adjustment mechanism introduced *inertia* into the system through both cost pushes and higher inflationary expectations. Thus, eliminating (or even limiting) indexation would provide an important blow to inflationary psychology and to cost increases. Second, according to the existing legislation the annual wage adjustment was due at the end of January of 1956. When the Mission issued its first report in mid-November 1955, Congress was already devoted to the discussion of the nature of the upcoming wage bill. It was, thus, fundamentally important to handle this situation head on, without much delay. It was considered that tackling the wage adjustment issue could *not* wait until a consistent and comprehensive package was fully available.

The central role given by the Mission to limiting the extent of indexation is apparent in the following quote from a letter to the Minister of Finance dated December 17, 1955:

“[I]t is clear that unless the current system of automatic wage readjustments is eliminated (or at least modified), it will be impossible to have a successful implementation of the restrictive credit and budget policies...”

In a grave and fateful mood the letter stated that:

“[t]he country is now a prisoner of a past that invented the current automatic [wage] adjustment system.”

A large fraction of the Mission's efforts during the first few months in Santiago were devoted to convincing government officials, politicians and civic leaders of the

necessity of limiting wage adjustment for 1956 to no more than 50% of accumulated past inflation.<sup>35</sup> The specific proposal (Law 12,006) was presented to Congress in November of 1955 and was approved by the Lower House (the *Cámara de Diputados*) on December 22 by a comfortable margin.<sup>36</sup> The PAL, other *Ibañista* groups and the right wing parties (conservatives and liberals) voted for its approval, with the left and the radicals opposing it.

The Senate, however, was a different story, since the government and its new allies did not have a clear majority. The 3rd of January of 1956 was probably one of the most memorable days in Senate history. The debate was long and intense and after two votes a nineteen-nineteen draw persisted. It was only on the 6th of January that this piece of legislation, known as the “Stabilization Program” (*Programa de Estabilización*), was approved when ailing Senator and former Presidential candidate, Cruz-Coke was brought to the Senate floor to participate in the third vote.

From a political economy perspective, perhaps the most important aspect of this episode is that Law 12,006 and, more generally, the Klein-Saks stabilization package as a whole was supported by the conservative and liberal parties. These were the same parties that had so vehemently opposed Ibañez del Campo in the past. Not only that, but these were the same politicians that in November of 1954 -- during the Prat stabilization attempt -- had refused to support legislation that would put an end to indexation. Why did they support this legislation in early 1956, and not in 1954? Was it only because inflation has crossed some threshold number that made it so costly as to make some political parties change their position?<sup>37</sup> Did the presence of the Klein-Saks Mission have anything to do with this change in the right's position? Some of these issues are addressed in Sections VI and VII of this paper.

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<sup>35</sup> Law 12,006 also established that during 1956, prices of basic goods and necessities – which were controlled by the government – would only increase by 40%.

<sup>36</sup>The vote was 56 in favor and 48 against.

<sup>37</sup>This is unlikely, since in November of 1954, when the Prat program was rejected, inflation was already 70%. It is difficult to think that some magic threshold is crossed when inflation moves from 70 to 80%.

## ***V.2 The End of the Affair: Unraveling and Departure***

As soon as Law 12,006, that restricted wage indexation, was approved, the Mission turned its efforts to the fiscal deficit. In a letter addressed to the Minister of Finance dated January 16, 1956 the Mission said:

“We need to note that...the limits on wage indexation and the control of credit would lose their effectiveness unless they are immediately followed by...[the] *control of fiscal expenditure...[and]...tax measures...*” [Emphasis in the original]

Among the expenditure-related measures the Mission recommended putting an end to low income housing subsidies, canceling public construction projects, reducing the personnel in diplomatic missions, increasing the price of postage, and suspending military purchases. In terms of tax measures the Mission suggested to levy taxes on the bases of current (as opposed to last year’s) income, raise fuel taxes, enforcing the tax code, and sending tax evaders to prison.<sup>38</sup>

The fiscal accounts, however, did not evolve in the way the Mission had envisaged them. On the one hand Congress was reluctant to enact a major tax reform; on the other, the Ibañez del Campo administration was unwilling to reduce expenditures in a significant way. Paradoxically, the IMF program of 1956 – under which the country borrowed US\$ 81.3 million – had a negative effect on fiscal austerity. The reasons for this were simple: at that time the IMF had yet developed the concept of *conditionality* and, thus, there were no formal (and legal) austerity conditions attached to the program. Once the IMF funds became available, the administration felt that a serious financial constraint had been lifted, and considered that there was no need to reduce expenditures drastically.<sup>39</sup> After declining in 1956, the fiscal deficit again increased in 1957; in 1958 it experienced a slight decline, but it was still being financed mostly by money creation (See Table 3).

A drastic drop in the price of copper in late 1956 and 1957 greatly affected fiscal revenues, and contributed to the higher deficit in 1957 and 1958 (See Figure 3 on the price of copper). The government reacted to the lower price of copper by increasing its

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<sup>38</sup> Mission letter to the Minister of Finance, January 16, 1956.

<sup>39</sup> See Remmer (1986) on the IMF programs in Latin America during the 1950s.

indebtedness from abroad and, especially, by money creation. In a Report to Congress' Joint Budget Committee, the Mission argued that the negative effects of a lower copper price had been amplified because the country lacked sufficient international reserves:

“The lack of a policy aimed at accumulating reserves...during periods when the price of copper was high, has implied that during the current year the monetary authorities have had to make a major effort to maintain the foreign exchange situation under control... Thus, it has been impossible to provide fiscal or credit assistance...to depressed regional industries...”<sup>40</sup>

As the fiscal imbalance increased, the stabilization program unraveled. In 1957 the wage rule was weakened, and a general wage increase equal to 80% of accumulated inflation was decreed. Moreover, credit controls were relaxed and the money supply started to expand at a more rapid pace. As a result of the decline in the price of copper the peso became under pressure. The authorities reacted negatively to the faster depreciation of the peso, and responded by increasing trade barriers. More specifically, during the second half of 1957, and against the Mission's recommendations, prior import deposits were increased very significantly.<sup>41</sup>

By early 1958 the Mission's program was rapidly losing political support and credibility. In May of that year the Mission issued a report of its work, including a set of recommendations for the future. Many of these had to do with fiscal policy, foreign exchange policy and the creation of strong public institutions.<sup>42</sup> But perhaps the most important set of recommendations had to do with inflation. The Mission insisted that inflationary financing would not provide a path to prosperity. By October of that year the Mission's work came to an end; inflation was rapidly creeping up. By December of 1958 it was 33%, and by June of 1959 it had already reached the 50% mark.

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<sup>40</sup> Report to the Congress' Joint Budget Committee, November 7, 1957

<sup>41</sup> French-Davis (1973).

<sup>42</sup> Interestingly, the Mission made two recommendations that were considered to be extremists at the time, but that today are at the core of Chile's economic institutions: a (relatively) independent central bank, governed by a small technical board; and, the reform of social security where “the individual himself would make decisions regarding the disposition of a substantial part of his income” Klein-Saks (1958, p. 48).

## VI. The Politics of Credibility and the Klein-Saks Mission

In order to understand fully the sequence of events that led to the adoption of the 1955-56 stabilization program it is necessary to explain the role played by the Klein-Saks Mission. What was the actual contribution of these foreign advisors in the implementation of this specific program? How does their work fit, if at all, within the political discussions and debates of that time? In what follows I look at these questions from three different perspectives. I first analyze what was new in the Mission's recommendations. I then investigate the political reception of the Mission's proposals, and I finally deal with the issue of the Mission's work and credibility.

### *VI.1 The Klein-Saks Mission as a Technocratic Team*

The simplest explanation of the Mission's role is the purely technical one. According to this view, foreign consultants would provide policymakers with a type of expertise unavailable in the country. Once the technical diagnosis work is done, domestic politicians and policymakers will have a clearer view of the problems at hand and, with the help of the advisors, could proceed to design a specific stabilization program. This interpretation of foreign advisors as providing technical expertise not available in the country does not require that all participants in the debate agree on the causes of inflation, and on the most desirable course of action. In fact, it is perfectly possible to think that this technical knowledge is more in line with a particular political view of the world than with others.<sup>43</sup>

A number of authors have endorsed the view of the Klein-Saks Mission as technocrats providing expertise not available in Chile at that time. In fact, this was the way the Mission was presented by the government in 1955: repeatedly, administration spokesmen and (part of) the media referred to the Mission as a group of politically neutral foreign experts that, as medical doctors, were coming to the country to provide a diagnosis of the nature of the sickness and suggest a specific treatment. This is, for example, the view of Correa Prieto (1963), who argues that the display of technical knowledge made by the Mission's Chief, Preston Carter, greatly contrasted with the low level of preparedness of the local technocrats.<sup>44</sup> While French-Davis (1973) has rejected

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<sup>43</sup> See Felix (1960).

<sup>44</sup> Correa Prieto (1963, p. 50); Wurth Rojas (1958).

the view that the Mission was political neutral, he has argued that it did indeed provide a type of technical expertise unavailable at that time in Chile. According to him most economists were then of a leftist-structuralist persuasion and, consequently, a government that wanted to pursue an orthodox type of adjustment program could not elaborate such a program with local experts.

Although there is little doubt that the Mission was formed by experienced professionals that contributed with a number of technical details in the design of policies, it is also true that their overall contribution to the diagnosis and formulation of policy was limited. As we have already seen, the Prat failed stabilization proposal (the “Program of Economic Rectification”) of November of 1954 included a large number of the components of the Klein-Saks program, including limiting the extent of indexation, fiscal austerity, and higher taxes.

A lengthy report presented by the Central Bank to the Chamber of Deputies in July of 1955 clearly indicates that at that time at least part of the economics profession in Chile had understood the country's inflationary problems in a way that fully coincided with that later developed by the Mission. For example, the proposed Central Bank program called for fiscal restraint, for the elimination of legislation that allowed the Treasury to borrow from the Central Bank, for the adoption of a freely fluctuating exchange rate, and for the implementation of an imports deposit scheme to control foreign trade. With respect to wages, the report argued that controlling their rate of increase was an essential component of the stabilization program.<sup>45</sup> It is interesting, however, to note that the report was not as forceful regarding wage deindexation as it was with respect to the other component of adjustment policies. This may be explained by the fact that it was at that time an exceedingly sensitive political issue, which the Bank Board tried to avoid to the extent possible.

From the analysis of both the Prat 1954 program and the Central Bank 1955 document, it is clear that, at least in terms of diagnosis and broad policies, the Klein-Saks program did not add novel aspects. Hirschman (1963) has argued that the only new device suggested by the mission was the system of advanced deposits on imports. This, however, it not correct. The Central Bank program specifically proposed “requiring [to

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<sup>45</sup>Banco Central de Chile (1956).

importers] a deposit in domestic currency in the Central Bank” (Banco Central 1956, p. 77). What was new was the suggestion of a *dual* floating rate system. The Central Bank program and other proposals that circulated at the time called for a unique floating rate. The absence of spectacular (and almost mythical) new policy propositions in the Mission program contrasts sharply with the UN report of 1950, which suggested a forced savings scheme as a sort of panacea that would quickly, and with little cost, help solve most (if not all) economic problems in Chile.<sup>46</sup>

The fact that the Mission had not suggested significant new perspectives or policy measures was a source of some irritation in Chile. Many felt that national pride was at stake since foreigners were coming into the country, recommending measures already discussed many times in the past. As Hirshman has pointed out, many considered the Mission's program as a (convex) combination of the Herrera and Prat programs of 1953 and 1954. The resentful sentiments of a large number of Chileans towards the Mission are captured from the opening statement from then Senator, and eventually President of the Republic, Salvador Allende during the debate of Law 12,006:

“[I] have stated that there are Chilean professionals with the required knowledge and ability to design, on the basis of an organic plan, the measures to be taken.”<sup>47</sup>

## ***VI.2 War of Attrition, Umpires and Mediators***

A popular interpretation of the role of foreign advisors and foreign agencies is that of an umpire that helps the locals select one of many alternative proposals for action. Hirshman (1963), for example, offers this explanation with respect to the role of the Kemmerer 1925 Mission that resulted in the foundation of Chile's Central Bank. According to him, when Kemmerer arrived, so many proposals for monetary reform had been discussed that the politicians and the public had become utterly confused. According to this view the role of the foreign advisors is just to pick one of the many proposals and, thus, help solve an impasse. It is worth quoting Hirshman on this point:

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<sup>46</sup>See United Nations (1951).

<sup>47</sup>Congreso Nacional de Chile, Diario de Sesiones del Senado, January 3rd, 1955, p. 1137.



“Examination of the many proposals that were put forward with ever-increasing frequency in the period 1913-25 makes it clear that the final Kemmerer bills did not contain any substantial innovations with respect to the crucial topics of restoration of the gold standard and the establishment of the Central Bank. The conclusion is therefore inescapable that the mission served principally as an *umpire*...” (Hirshman, 1967, pp. 176-77; emphasis added).

Alternatively, one can think that foreign advisors provide new information to the different groups on the costs and consequences of the crisis, thus convincing some of them that they should give up their “extreme” positions. According to this interpretation, by pointing out angles previously unseen by the different groups, the foreign advisor contributes to obtaining an earlier end to the “war of attrition.” Players that would have refused to give up in the absence of this new information, decide to compromise earlier on. This interpretation is close to that provided by the Klein-Saks Mission itself in 1958. In a summary document published in May of that year, it is said:

“[T]he only program with a chance of success was deemed to be a broad attack on many fronts, in which all factions would contribute, through a gradual retreat from their previous extreme positions ... In attempting to aid in the implementation of such a program, the Mission has always seen its main contribution is acting as an objective advisor on the over-all aspects of a balanced program...” (Klein-Saks, 1958, p. 6).

Although the interpretation of the role of the Klein-Saks Mission as an umpire and a mediator is quite appealing, it presents some problems.<sup>48</sup> First, as has already been established, the Mission contributed very little in terms of new perspectives, and provided little new information to what already was on the table in mid-1955. This casts serious doubt on the interpretation based on additional information being provided in the context of a war of attrition.

A second problem is that war of attrition models assume that, although different groups struggle to obtain larger fractions of national income and try to avoid paying a large fraction of the costs of stabilization, they basically agree on what should be done to

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<sup>48</sup> In fact, in light of the previous discussion, if one were to replace the reference to Kemmerer for Klein-Saks and monetary reform for a stabilization program, the quote from Hirshman would appear quite plausible.

eliminate inflation. In these models there is no “ignorance” or disagreement with respect to the way in which the world works. Inflation, and the inability to put together a timely stabilization program, is the unavoidable result of a distributive conflict; in these models there is no room for dissenting approaches to stabilizing. The only source of conflict is who pays a larger share of the costs of reducing inflation. This important assumption of the war of attrition models is flatly contradicted by the history of the Klein-Saks program.

The Congressional debate that preceded the approval of Law 12,006 shows that different groups and parties strongly disagreed on what was the most adequate course of action to defeat inflation. For example when explaining his negative vote Senator Ampuero, the former Secretary-General of the Socialist Party, argued that the proposed fluctuating exchange rate was contrary to the goal of solving inflation and staging a recovery problem. Another opposition senator expressed:<sup>49</sup>

“Honorable Senate, we should remember that even before any wage adjustment law was enacted, Chile already suffered from high inflation .... Consequently to argue that the law of wage adjustment is the main engine of inflation contradicts, in my view, Chile's economic and history experience...” (Diario del Senado, January 3, 1956, p. 1181)

But it is perhaps the statement by radical deputy Muñoz-Horz the one that more vividly captures the opposing views on the mechanics of inflation:

“[T]he inflationary process has ... increased in an exaggerated way profits of productive firms. This demonstrates that the automatic increase of wages is not precisely the engine of inflation... From what has been said it follows that in order to end this serious inflationary process it is necessary, first and foremost, to fix and freeze prices and immediately to increase salaries, wages and pensions so that they achieve parity with prices.” (Diario de la Cámara de Diputados, Dec. 22, 1955, pp. 2549-50)

It is evident, then, that the views prevailing at the time regarding the causes of inflation, and the most appropriate course for the stabilization program, were significantly different. It is difficult, consequently, to agree with the view that the Klein-Saks Mission acted as a mediator that helped all factions decide how much to contribute

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<sup>49</sup>Socialist Senator Luis Quinteros.

towards the achievement of the stability growth. Indeed, the Mission approach was considered to be completely erroneous by a large group of politicians, economists and journalists.

### ***VI.3 Credibility and the Klein-Saks Mission***

As was pointed out in Section II, modern theories of inflation and stabilization have emphasized the role of *credibility* in achieving a rapid and (relatively) costless adjustment process. To the extent that governments are able to affect expectations, and persuade the private sector that a change of regime will be engineered, the disinflation process will have a higher probability of success. The problem, however, is that governments tend to have difficulties in making *credible* promises. That is, there are usually few institutional arrangements that can assure the public that the government will not renege on its promises after the private sector has already made important decisions. A key issue in establishing credibility, then, is to design mechanisms that will allow the government to precommit itself.

An interesting line of analytical reasoning postulates that *reputational constraints* can sometimes act as good substitutes for precommitment technology.<sup>50</sup> Policymakers afraid to damage their reputation will tend to stick to their promises. This is an elegantly plausible idea, but the Ibañez del Campo administration had very little *reputational capital* to protect. In late 1955 and early 1956, the Ibañez del Campo government was particularly non-credible. The general had changed alliances, denounced former collaborators and gyrated too rapidly to give any confidence to the public.

The Ibañez del Campo credibility problem is neatly evidenced in the speech given by Senator Luis Bossay, President of the opposition Radical Party, during the debate on Law 12006 on the Stabilization of Prices and Wages. After arguing that wage deindexation constituted only an isolated measure that did not go to the heart of the problem, he said:

“It is true that [Finance] Minister Herrera Palacios ... referred to the adoption of complementary measures... Do we have any assurance that after

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<sup>50</sup> See, for example, Drazen (2000) and Person and Tabellini (2000).

approving one measure, the rest of them will be implemented? ...[T]he cruel experience of three years shows that this hesitant, incoherent and contradicting government is unable of designing and maintaining, with perseverance, a financial and economic policy; we have no confidence that it is committed today of implementing a coherent plan that would put an end to the inflationary process..." (Diario de Sesiones del Senado, 3rd January 1956, p. 1152).

In fact, the Ibañez del Campo administration announcements and promises had become non-credible for every political party in the opposition. Not only were the center and left skeptical regarding the government's ability to deliver on its promises, but the right wing, which the President was seeking as a new ally, was equally doubtful. Senator Moore, from the liberal party, described the government as following a "zig-zagging approach full of contradictions and incomplete attitudes."<sup>51</sup> On the other hand, Senator Marin, from the liberal party, questioned the government's ability to maintain an announced course of action.

The credibility problem had been compounded by the fact that after the abortion of the Prat Stabilization Program in November of 1954, there had been four different ministers of finance that had taken half-baked and often contradictory measures, while inflation continued its rampant pace.

In some way the Central Bank was the only public institution that had some credibility. Its professional staff was well respected and as we have seen its proposed stabilization program of July 1955 was sophisticated and suggested a number of fundamental measures. The Bank, however, was handicapped by its lack of independence from the government. In spite of a reform to its Charter in 1953, the Board was still dominated by representatives of the executive. This lack of independence was so evident that during his short tenure as minister of finance the populist Guillermo del Pedregal strongly maneuvered to oust the Central Bank Governor Arturo Maschke.<sup>52</sup>

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<sup>51</sup>Diario Sesiones del Senado, January 3, 1955, p. 1146.

<sup>52</sup>For a fascinating insider's view of economic policy making during this period, see Maschke's memoirs (Maschke 1990). I had the opportunity to interview Mr. Maschke in 1991, when I first got interested in studying this period of Chile's economic history. I must say that I had the most wonderful and interesting time talking with him at his Providencia apartment. That same year I also interviewed Dr. Anibal Pinto, one of Chile's most influential academic economists during the time of the Klein-Saks Mission, and Mr.

When looked at from the perspective of a government with total lack of credibility and virtually no reputational capital, recurring to an external advisor begins to make sense. By taking this measure the government was signalling its intentions of altering its behavior. It is also possible that the government officials expected that by hiring the Mission they were acquiring some *reputational capital*. Additionally, by doing this, a sense of continuity was introduced into the program. Even if Ibañez del Campo decided to replace the minister of finance, the mission technocrat were still around to carry on the battle.

A number of authors have recently argued that external agencies, such as the World Bank and the International Monetary Fund, can provide credibility to adjustment and stabilization programs.<sup>53</sup> This can happen in two related ways: first, by violating agreements with these agencies the country in question will incur in costs that will usually come in the form of losses of resources obtained through specific programs. These costs, of course, will make policy changes less probable than otherwise. Second, through the monitoring of the country's economic performance the external agencies provide information to other (external) actors, including foreign government, and private creditors. In a way, through the provision of information these external institutions make the country's reputation more transparent and easy to control, thus making this constraint more binding.

Although the Klein-Saks mission did not have funds of its own to provide to the Chilean government, its connections with the international financial community and the U.S. government made its role rather effective. In fact, after putting together the most important element of the stabilization program, the mission helped the government obtain U.S. \$70 million in fresh resources. Additionally, the mission's work during late 1955 and early 1956 paved the path for Chile's stand-by agreement with the IMF in April of 1956. This, however, leaves open the question of why the Chilean government decided to hire private advisors rather than going directly the IMF. There are two explanations for this decision. First, at this time the IMF had relatively little experience in setting up

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Arturo Fontaine Aldunate, who had been the Under Secretary of Finance during Jorge Prat's tenure as minister. These interviews were extremely useful in helping me understand better the politics and economics of the second Ibañez administration.

<sup>53</sup> Edwards (1989), Drazen (2000).

programs with the developing countries. For instance during 1953-1955 a total of only *five* stand by agreements had been signed, with most of them being with European nations. Additionally, the fact that the Klein mission to Peru in 1949-1954 had been well received by the international community made the Washington consultants natural candidates for this job. Second, hiring a private advisory group that would take residency in Santiago, and would provide a daily monitoring of the economic situation, helped the government to gain *political* credibility with the domestic right, whose support it required to approve the key elements of the program.

The mounting political tension of 1955 greatly influenced the right's decision to change its strategy and to support the Ibañez del Campo administration anti-inflation program. It became apparent at that time that the increasing economic chaos had generated serious anti-democratic sentiments among sectors of the military. The “Straight Line” (*Linea Recta*) movement was acting openly and a number of nationalistic elements were calling Ibañez del Campo to close Congress, and to establish himself as an autocratic ruler that would return order and put an end to inflation. This possibility represented great political danger for the rightist politicians who clearly remembered the setbacks suffered during the first Ibañez del Campo authoritarian rule in 1924. Moreover, at this point the conservative-liberal coalition had great expectations that their candidate could win the upcoming Presidential election in 1958.<sup>54</sup> In a way, then, the right was caught between two undesirable alternatives: to continue opposing Ibañez del Campo at all costs and, thus, risking a coup that would seriously jeopardize their chance of getting the presidency; or to support an untrustworthy administration that was well known for its gyrations and changes in policies.

The fact that the right weighted the political consequences of not supporting the stabilization program is apparent from liberal Senator Moore's speech on the 3rd of January, 1955.<sup>55</sup> He candidly stated:

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<sup>54</sup>Jorge Alessandri, the right candidate, in fact won that election.

<sup>55</sup>The quotes that follow come from the *Diario de Sesiones del Senado*, 1/3/55.

“The liberal Party does not favor a coup d'etat; it does not expect ... to resolve this issue by force and by spilling blood ... We desire that Mr. Ibañez serves his full term...” (p. 1147).

And he went on to say:

“We do not favor a coup ... Should we, then, blindly oppose the government from Congress? No. That would damage even more the reputation of the political parties; it would offer a motive to finish them and to close Congress...” (p. 1148)

And, he referred to the dilemma faced by his party in the following way:

“We will continue to defend legality, and we are demonstrating this by providing Mr. Ibañez with a legal tool. We place a delicate tool in clumsy hands...” (p. 1148).

However, one thing was to weight the costs of not supporting the government and seeing the economic situation further deteriorate, and a different thing to provide Mr. Ibañez del Campo with a blank check. In order to support the government, the right required certain guarantees that the overall package would include policies particularly important for this group. Among these policies, perhaps the most controversial one referred to the reform of the exchange rate system, including the adoption of a freely fluctuating rate. The key importance attached by the right to the exchange rate policy is manifest in a number of interventions in the Congressional debate of that time. For instance, conservative Senator Prieto stated:

“[T]here is no possibility of expanding production if the [foreign exchange law] retains ... fixed and discriminatory rates ...” (Diario de Sesiones del Senado, 1/3/55, p. 1167.)

In this regard, then, the Klein-Saks Mission, with its historical record of supporting fluctuating rates and its good relation with the International Monetary Fund, provided an important element in persuading the Right to support the government. The Klein-Saks Mission provided, to the extent possible, an assurance that the policies were going to be

consistent with what had been (implicitly) agreed upon. In other words, by having hired the Klein-Saks Mission the government not only sought to obtain domestic and international *economic* credibility, but it was also trying to credibly precommit to a key *political* group that there would be no sudden changes in the future course of action. But, how credible was the Mission's program? Did the Mission's work in fact, affect expectations? And, if it did, was this a short term break in expectations, or was it relatively long-lasting?<sup>56</sup> This, and related issues, are tackled in detail in Section VII of this paper.

## VII. Policy Credibility and Structural Breaks: An Empirical Investigation

In his highly influential work on inflation and stabilization, Sargent (1983, 1986) has argued that a credible anti-inflationary program results in a rapid change in the monetary and inflationary *regimes*. If the public believes that the policy will work – that is, that the policy is credible --, it will incorporate its changed expectations into its decision making process, including decisions on pricing, speculation, wage bargaining, capital flows and so on. These changes in expectations, in turn, will be translated into a change in the behavior of endogenous variables, such as interest rates, exchange rates and inflation. This, for instance, was what happened during Raymond Poincare's stabilization program in France in the 1920s. It is also what happened with the founding of the Federal Reserve System, in late 1914.<sup>57</sup>

From an econometric point of view, credible changes in regime will be reflected in break points in the time series of the key endogenous variables. For example, as argued in Edwards (1993, 1998) a credible stabilization program would be reflected in a decline in the degree of *inertia* in the rate of inflation. In this section I use data on the black market exchange rate premium, as well as on inflation to analyze the extent to which the policies of the Klein-Saks Mission were

<sup>56</sup> Of course, we know that it was not *that* long lasting. After all, the Mission did fail and by December 1958 inflation was already 33%.

<sup>57</sup> See Mankiw, Miron and Weil (1987) for an analysis on the change in interest rate behavior after the founding of the Fed, a policy that the authors (rightly) consider to represent a major change in regime in U.S. monetary policy. In Edwards (1998) I used short term interest rate data to analyze whether changes in Chile's capital controls policy were credible and effective.



indeed credible.<sup>58</sup> Generally speaking, a credible stabilization program should be reflected in a very rapid – i.e. instantaneous – break in the time series properties of financial variables, such as interest rates and (market determined) exchange rates. A credible stabilization program would also be reflected, although more slowly, on structural breaks in the time series behavior of inflation. In particular, if the stabilization program is indeed credible, the rate of persistence (or inertia) would rapidly decline, as would the expected long term rate of inflation.

### ***VII.1 The Credibility of the Klein-Saks Mission and the Exchange Rate***

In Figure 4 I present the evolution of the official exchange rate, as well as the parallel (i.e. free) market exchange rate for the period January 1953-December 1956. As may be seen, the month the mission arrived into Chile, September 1955, the parallel market rate (PER) experienced a drastic decline of 23% -- it went from 770 pesos per dollar in August, to 595 pesos per dollar in September. This is quite impressive considering that at that point the Mission had very little to show for its work. In the next two months, however, the public became increasingly skeptical, with the parallel rate climbing back to high levels -- although not as high as the maximum attained in August of 1955. In January of 1956, once Law 12,006 was approved, the parallel rate fell by 24%, and the premium declined by almost 70%. During 1956 the parallel market rate was rather stable and after the adoption of the new exchange rate regime in April the premium virtually disappeared (see Figure 4), suggesting that the private sector perceived the Klein-Saks effort as a serious attempt at changing the nature of the inflationary process. Interestingly enough, as can be seen from the figure, the only other period with a significant decline in the free market rate corresponds to Prat's tenure as Minister of Finance. However, as soon as it became apparent that his program was not going to be approved by Congress, the free market rate rapidly climbed to higher levels (see shaded area in Figure 4). This figure, then, suggests that there was a short-lived break in expectations that took place at the arrival of the Mission.

In order to analyze formally the extent to which the Mission affected expectations, I estimated a series of equations for the parallel market exchange rate premium, and I

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<sup>58</sup> Since there are no data on market-determined interest rates, I have not attempted to analyze structural breaks in interest rate behavior.

analyzed whether the equation had exhibited a structural break around the time the Mission began its work. The basic equation has the following form:

$$(1) \quad premium_t = \alpha_0 + \alpha_1(\log \overline{OER}_t - \log OER_t) + \alpha_2 \frac{\Delta M_{t-1}}{M} + \alpha_3 premium_{t-1} + \varepsilon_t,$$

Where *premium* is the parallel market premium;  $OER_t$  is the official exchange rate;  $\overline{OER}_t$  is the “equilibrium” nominal exchange rate, that would prevail in the absence of rationing;  $\frac{\Delta M_{t-1}}{M}$  is the excess supply of money M1; and  $\varepsilon$  is an error term assumed to have the standard properties. As long as there are exchange restrictions, the intercept will be significantly positive. Generally speaking, we would expect  $\alpha_1$  to be positive, indicating that a the larger is the gap between the equilibrium and the actual official nominal exchange rate, the larger will be the premium. Notice, that this means that, to the extent that the equilibrium nominal exchange rate is unchanged, a nominal devaluation of the official rate (that is an increase in  $\log OER_t$ ) will result in a decline in the parallel market premium. The  $\alpha_2$  coefficient is expected to be positive, indicating that a larger excess supply for money will result in a larger premium. Coefficient  $\alpha_3$  is expected to be positive and smaller than one. This coefficient measures the degree of inertia of the foreign exchange premium; the closer this coefficient to one, the higher is the degree of inertia.

A credible stabilization plan is expected to be reflected in a structural break in equation (1) governing the foreign exchange premium. More specifically, when a credible stabilization plan is implemented, it is expected that the values of both  $\alpha_0$  and  $\alpha_1$  will decline. Indeed, under extreme credibility that eliminates inflationary pressures and exchange restrictions, it would be expected that  $\alpha_0$  and  $\alpha_1$  would very rapidly converge to zero. Notice that in this case the equilibrium (steady state) value of the premium would be equal to zero.

In order to analyze if the adoption of the Klein-Saks program indeed affected expectations, I followed the following strategy. First, I use equation stability tests to analyze whether one observes a breakpoint in equations of the type of (1) around the time

of the program's adoption. Second, I add a number of dummy variables to the estimation of equations of the type of (1), as a way of analyzing this issue in greater detail. I am particularly interested in investigating whether  $\alpha_0$  and  $\alpha_1$  experienced a significant decline at the time of the program. In this analysis I have used the Hodrick-Prescott stochastic trend component of (the log of) the official exchange rate as a proxy for  $\overline{OER}_t$ .<sup>59</sup> All the results discussed in this section were obtained using monthly data. See the Appendix for exact variables' definitions and sources.

In Table 4 I present regression results for equation (1). The first column uses a 1948-1958 sample, while in columns (2) the sample covers the 1948-1962 period. The results are quite similar across these two base equations; all the coefficients have the expected signs and are significant at conventional levels. Interestingly, these estimates suggest that during this period the parallel market premium had a high degree of inertia. Indeed, the estimated coefficient for the lagged premium is 0.78 and 0.85. In the discussion that follows I focus on the results obtained when the 1948-1962 sample is used.<sup>60</sup> As pointed out earlier, an important question for the credibility analysis is whether there was a change of regime at the time of the Mission's program. An F-test for equation stability suggests that equation (1) indeed experienced a structural break during the September 1955 and the September 1958 period: the value of the test is 15.8, indicating that the null hypothesis of no structural breaks is rejected at conventional levels.<sup>61</sup>

As a way of understanding further the reaction of expectations and of the foreign exchange market to the Mission's program, I included dummy variables for the 1955-1958 in the estimation of equation (1). In total, seven dummies were included: the first one (D552) takes a value of one for the September-December 1955 period, and zero otherwise. The other dummies – D561, D562, D571, D572, D581, and D582 – take a value of one for the respective six month period, and a value of zero otherwise (that is, D561 has

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<sup>59</sup> I also assumed that for the period under study the equilibrium nominal rate was a constant. In this case instead of the nominal exchange rate gap, the estimated equation will only have the log of the official rate. In terms of the credibility analysis, the results obtained when this alternative specification was used were similar to those discussed here, and have not been reported due to space considerations.

<sup>60</sup> This is appropriate, since in 1960-61 a new and bold stabilization program based on the pegging of the exchange rate and the elimination of all capital account restrictions was put into place. For details see, for example, French-Davis (1973).

<sup>61</sup> This is a Chow F-test. The null hypothesis is that there are no structural breaks.

ones for January-June 1956). The results, which are in Column (3) of Table 4, indicate that the effects of the Mission's program on expectations and the foreign exchange market were quite complex. As soon as the Mission arrived – and even before it started working -- there was a sharp decline in the degree of persistence of the premium: the coefficient of  $(D552 \times premium_{t-1})$  is -0.721 and significant at the 5% level. This suggests that by the end of 1955 the parallel market premium had completely lost persistence – indeed a  $\chi^2$  test indicates that the null hypothesis of equality of coefficients cannot be rejected at conventional levels. The results also indicate that the coefficient of  $(D561 \times premium_{t-1})$  is significantly negative, with a point estimate of -0.721; moreover, the null hypothesis that the degree of inertia in the first half of 1956 is zero cannot be rejected. These results indeed suggest that the hiring of the Mission indeed altered expectations, and changed the structural behavior of the parallel market premium.

This decline (or disappearance) in the degree of persistence was short lived however. As may be seen from Table 4, starting in the second half of 1956, the coefficients of the dummy variables interacted with the lagged premium are not significantly different from zero, and the degree of persistence in the parallel market for foreign exchange goes back to what it had been before the Mission's arrival in Chile. As may be seen, the intercept dummies are not significantly different from zero.

### ***VII.2 Credibility and Inflationary Inertia***

In this section I analyze whether inflationary inertia declined in Chile in the period surrounding the Klein-Saks stabilization program. In order to do this I estimated a number of equations of the following type:

$$(2) \quad Inf_t = \beta_0 + \beta_1 \frac{\Delta M_{t-1}}{M} + \beta_2 DevPar_{t-1} + \beta_3 DevOff_{t-1} + \beta_4 Inf_{t-1} + \beta_5 (Dummy \times Inf_{t-1}) + \sum \sigma_j S_j + \psi_t$$

*Inf* is inflation, measured as the percentage change in the CPI relative to the same month in the prior year;  $\frac{\Delta M_{t-1}}{M}$  is the rate of growth of M1, also measured relative to the previous year; *DevPar* is the rate of change in the parallel (i.e. free) exchange rate;

*DevOff* is the rate of change of the official exchange rate; *Dummy* is a dummy variable that takes the value of one during the stabilization program;  $S_j$  are seasonal dummies; and  $\psi_t$  is an AR(12) error term.<sup>62</sup> To the extent that the stabilization program has indeed resulted in a decline in the degree of inertia, the estimated coefficient for  $\beta_5$  would be significantly negative. As in the analysis of the exchange rate market, in the estimation I considered several alternative dummy variable that cover different time spans.

In Table 5 I present the results obtained from the estimation of several versions of equation (2). Since the rate of devaluation in the parallel (i.e. free) market is endogenous I used instrumental variables in the estimation; the standard errors were estimated using the Newey-West procedure.<sup>63</sup> The estimates in Column (1) assume that there are no structural breaks during the period under study. In Column (2) I have used one dummy variable (*DKS*) for the complete Klein-Saks period; it takes the value of one for September 1955-September 1958, and zero otherwise. In Column (2) I have distinguished seven sub-periods; as in Table 4, the dummies *D552*, *D561*, *D561*, *D562*, *D571*, *D572*, *D581*, and *D582* refer to six successive six months periods.<sup>64</sup> As may be seen, during the period under study inflation experienced a very significant degree of inertia. For instance the estimate of the lagged dependent variable in Column (1) is 0.896. The coefficients of money creation and exchange rate changes are positive as expected, and with the exception of the coefficient of  $\frac{\Delta M_{t-1}}{M}$  are significant at conventional levels. Column (2) suggests that the degree of the Klein Saks program there was a very small, and statistically significant, decline in inertia: the estimated coefficient of ( $DKS \times Inf_{t-1}$ ) is equal to -0.044 and has a t-statistic of -2.36. The results in Column (3) look at this issue in greater detail, by replacing *DKS* with the array of dummies *D551*-*D582*. As may be seen, these results give a rather more textured and complex story: according to these estimates the decline in inflationary inertia was small and very short

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<sup>62</sup> Since the monthly rate of inflation is defined as a year over year variable, equation (2) has to be estimated under the assumption of an AR(12) error.

<sup>63</sup> The following instruments were used: *xx,xx,xx*. Because inflation is computed on a 12 months basis, the seasonal variables turned out to be non significant, and were excluded in the final estimation. If included the results are virtually the same as in Table 5.

<sup>64</sup> A preliminary analysis indicates that the intercept did not change during the period under study. Consequently, no dummies for the intercept were included in the regressions reported in Table 5.

lived, and took place during the first half of 1956. This is immediately after Law 12,006 that reduced the extent of wage indexation was approved by congress. If the program had been credible, one would have expected that during the next few months inertia would have fallen further. According to the results in column (3) the opposite, actually happened: beginning in the second half of 1956 the degree of inflationary inertia was back to the level it had had prior to the program.

As a final step in this analysis I used a Kalman-Filter approach to estimate a time-varying coefficient version of equation (2). In the estimation I assumed that the coefficient of  $Inf_{t-1}$  was the only time-varying coefficient. As before, I assumed that the error term was characterized by an AR(12) process. The result obtained for the inertia coefficient is displayed in Figure 5. This figure shows very clearly that in the months preceding the arrival of the Klein-Saks mission the degree of inflationary inertia in Chile was increasing rapidly. Indeed, the coefficient of  $Inf_{t-1}$  climbed from 0.81 in mid 1953 to 0.92 by mid 1955. This figure also confirms the findings in Table 5: immediately after the Klein-Saks mission began its work there was a very small reduction in inertia. This, however, did not gather force, nor was it very significant. By late 1958, the degree of inertia continued to be substantial; indeed much higher than in mid 1953.

## VIII. Concluding Remark

[To be written]

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**Table 1**  
**Inflation Rate: 1946-1958**  
 (Dec. to Dec. CPI % change)

<i>Year</i>	<i>Inflation rate</i>
1946	30.1
1947	23.1
1948	16.8
1949	20.4
1950	16.7
1951	22.8
1952	12.0
1953	56.6
1954	71.0
1955	84.0
1956	37.8
1957	17.1
1958	32.5
1959	32.9
1960	5.4
1961	10.2
1962	26.7

Source: International Financial Statistics, IMF.

**Table 2**  
**Multiple Exchange Rates: 1947-1955**  
 (Chilean Pesos per U.S. Dollar at End of Year)

	<i>Government</i>	<i>Preferential</i>	<i>Official</i>	<i>Banking</i>	<i>Special</i>	<i>Commercial</i>
1947	19.37	25	31	.	.	.
1948	19.37	25 <sup>a</sup>	31	43 <sup>c</sup>	.	.
1949	19.37	25	31	43	.	.
1950	19.37	25	31	43	50 <sup>d</sup>	60 <sup>e</sup>
1951	19.37	-	31	43	50	60
1952	19.37	-	31	43	50	60
1953	-	-	110 <sup>b</sup>	-	-	-
1954	-	-	200 <sup>f</sup>	-	-	-
1955	-	-	200	-	-	-

Source: Pick's Currency Yearbook, several issues.

<sup>a</sup> Discontinued January 9th

<sup>b</sup> Devaluation October 5th

<sup>c</sup> Beginning February 4th

<sup>d</sup> Beginning August 1st

<sup>e</sup> Beginning January 10th

<sup>f</sup> Devaluation November 10th

**Table 3**  
**Fiscal Deficit: 1952-1964**

	<i>Fiscal Deficit (% GDP)</i>
1952	4.3
1953	4.9
1954	4.0
1955	4.2
1956	2.2
1957	3.6
1958	3.2
1959	3.9
1960	5.3
1961	5.1
1962	6.2
1963	5.5
1964	4.9

Source: French Davis (1973) and IMF.

**Table 4**  
**Credibility and Exchange Rate Premium: Regression Analysis**

	(1)	(2)	(3)
Constant	0.283 (3.896)***	0.139 (3.028)***	0.208 (3.913)***
Nominal exchange rate disequilibrium	1.771 (7.355)***	1.494 (7.477)***	1.657 (8.167)***
M1 excess of supply	0.020 (1.905)*	0.016 (2.109)**	0.018 (2.329)**
Lagged Premium	0.779 (21.772)***	0.847 (32.252)***	0.827 (29.473)***
D552* Lagged Premium	-	-	-0.721 (-2.113)**
D561*Lagged Premium	-	-	-0.721 (-1.993)**
D562*Lagged Premium	-	-	-1.107 (-0.425)
D571*Lagged Premium	-	-	1.865 (0.408)
D572*Lagged Premium	-	-	-0.409 (-0.225)
D581*Lagged Premium	-	-	-0.277 (-0.294)
D582*Lagged Premium	-	-	-0.414 (-0.191)
D552	-	-	1.162 (1.531)
D561	-	-	0.163 (0.620)
D562	-	-	0.133 (0.390)
D571	-	-	-0.426 (-0.730)
D572	-	-	-0.175 (-0.527)
D581	-	-	-0.183 (-0.619)
D582	-	-	-0.165 (-0.221)
Adjusted R-squared	0.88	0.90	0.91
Durbin-Watson	1.67	1.80	1.73
Akaike info criterion	10.41	10.18	10.21
Schwarz criterion	10.50	10.25	10.53
F-statistic	313.28	535.78	100.34
Prob(F-statistic)	0.00	0.00	0.00
Sample	48-3: 58-12	48-3: 62-12	48-3: 62-12
Observations	130	178	178

t-statistics in parentheses. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**Table 5**  
**Credibility and Inflation Inertia: Regression Analysis (IV)**

	(1)	(2)	(3)
Constant	0.096 (0.123)	-0.583 (-0.702)	-0.067 (-0.071)
Lagged inflation	0.896 (26.801)***	0.938 (31.188)***	0.940 (26.370)***
Lagged M1 growth	0.028 (0.689)	0.037 (0.922)	0.020 (0.555)
Lagged free exchange rate growth	0.045 (4.330)***	0.043 (4.098)***	0.035 (2.884)***
Lagged official exchange rate growth	0.021 (3.018)	0.013 (1.601)	0.014 (1.386)
DKS*Lagged inflation		-0.044 (-2.358)**	
D552* Lagged inflation			0.007 (0.237)
D561* Lagged inflation			-0.052 (-1.738)*
D562* Lagged inflation			-0.036 (-1.217)
D571* Lagged inflation			-0.017 (-0.658)
D572* Lagged inflation			-0.088 (-1.082)
D581* Lagged inflation			0.002 (0.039)
D582*Lagged inflation			0.042 (0.355)
AR(12)	-0.400 (-4.479)***	-0.423 (-4.999)***	-0.413 (-4.113)***
Adjusted R-squared	0.97	0.98	0.97
Durbin-Watson	1.44	1.56	1.56
F-statistic	1158.96	1023.07	496.10
Prob(F-statistic)	0.00	0.00	0.00
Sample	50:2-62:12	50:2-62:12	50:2-62:12
Observations	155	155	155

t-statistics in parentheses. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

Figure 1  
Inflation Rate

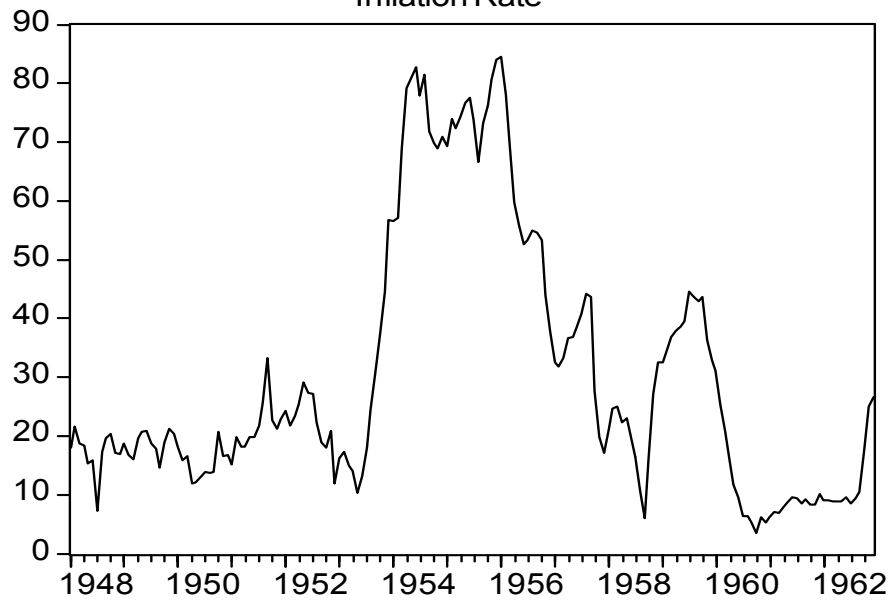


Figure 2  
Black Market Premium

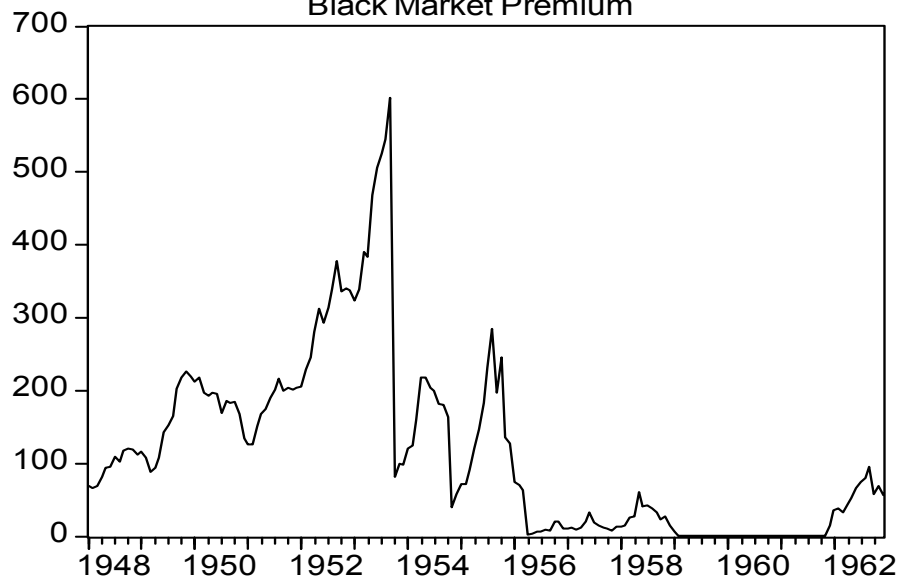


Figure 3  
M1 Growth

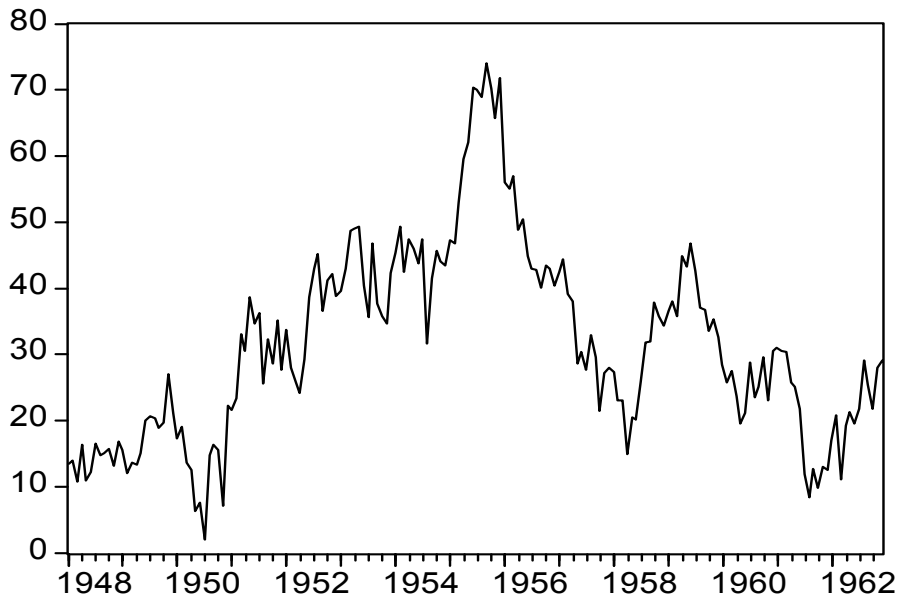


Figure 4  
Parallel and Official Exchange Rate

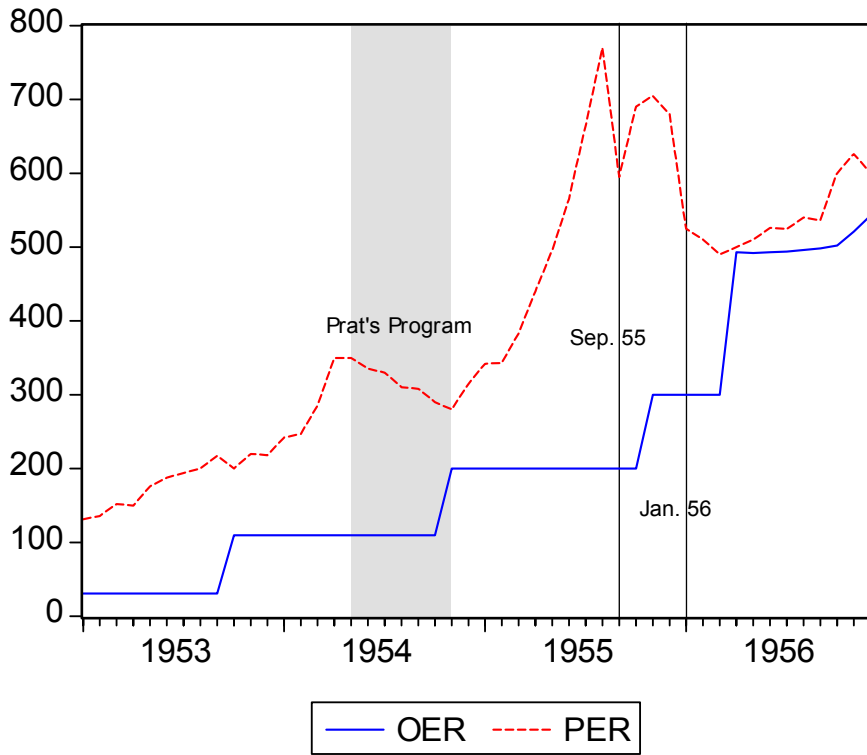
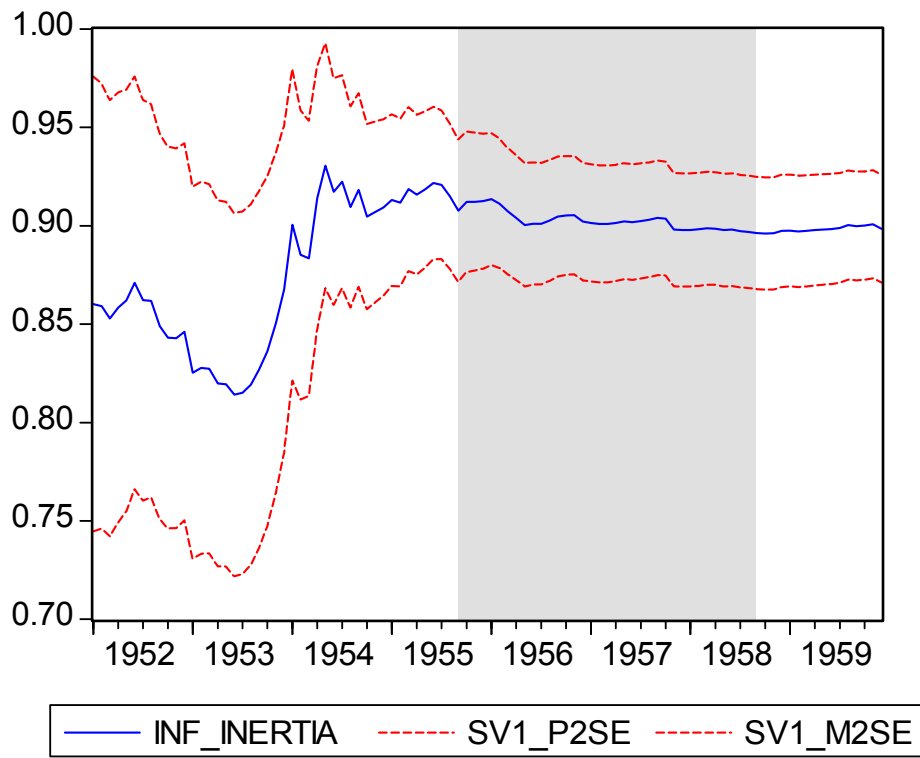


Figure 5  
Inflationary Inertia Coefficient: Kalman Filter Estimation





Appendix  
Monthly Data

<i>Variable</i>	<i>Definition</i>	<i>Source</i>
Inflation	Rate of growth of Consumer Price index	International Financial Statistics, IMF, various issues.
Official exchange rate	Chilean pesos per U.S. dollar	Monthly bulletin, Central Bank of Chile, various issues.
Market exchange rate	Chilean pesos per U.S. dollar	Pick's Currency Yearbook, Pick Publishing Corporation, New York, various issues.
Money supply	Monetary base: M1	Mamalakis, M. J. (1983): Historical statistics of Chile. Money, Prices, and Credit Services. Vol. 4. Greenwood Press.