

Unemployment Protection in Chile

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A. Risks in the Labor Market

Interruptions of earnings caused by unemployment and reductions in the real value of earnings caused by inflation are two important risks that face persons active in the labor market. The following paragraphs discuss these phenomena and the possible mechanisms for addressing the risks that they pose.

Inflation

Inflation poses risks for all labor force participants. Employed workers have concerns that earnings growth keeps pace with price changes so that real earnings are not eroded by inflation. For those unemployed and in receipt of unemployment insurance or other social protection payments, the real value of payments is reduced unless (automatic or discretionary) adjustments take place to counter the effects of inflation.

While the Chilean economy has experienced only modest inflation since the mid 1990s, very high inflation occurred during the early 1970s. Measurable inflation also characterized many years between 1980 and the mid 1990s. High inflation in Chile has not been confined to the single episode of the early 1970s.

Table III-1 provides summary detail on annual inflationary experiences over the years 1971 to 2000. The table places Chile within the broader geographic context of the G7 countries and eleven other Latin American countries, showing distributions and medians of inflation in GDP deflators. For the G7 countries, only 36 of 209 inflation rate observations equaled or exceeded 10 percent while only 62 of 328 observations fell below 10 percent among the 11 Latin American countries.¹ The respective medians of 4.9 percent and 24.3 percent help to capture the vivid contrasts in inflation for the two groups of countries.

The Chilean experiences summarized in the three right-hand columns of Table III-1 illustrate that inflation has been a measurable phenomenon in its history. The median annual increase in the GDP deflator during the 1971-2000 period was 21.0

percent, but, perhaps more important, the median was 15.0 percent for the 1981-2000 period. During these recent 20 years, the median annual rate of wage inflation was 19.5 percent. In short, there is ample historical evidence of substantial inflation in Chile even after removing the experiences of the 1970s which witnessed annual inflation in excess of 100 percent in each of the five years between 1973 and 1977.

How should the inflation risk be addressed? The response to this question hinges on one's interpretation of the historical evidence presented in Table III-1. It seems clear that the inflation has been a frequent occurrence even though inflation since the mid 1990s has been low. For an unemployed worker, the size of the loss from inflation depends on the time interval between the base period, i.e., the pre-separation period used to establish the level of the benefit payment, and the period of benefit reciprocity. In most situations this will average from six to 12 months.² In an environment of 20 percent annual inflation, a six month interval implies a 10 percent loss in the real value of UI benefits while a 12 month interval implies a 20 percent loss. However, in an environment of 5 percent inflation the corresponding losses would be only 2.5 percent and 5.0 percent respectively. Because of their small size, the latter losses could be addressed with a coping strategy as discussed in Chapter I.

Since future inflation is uncertain, there is an argument for benefit indexation to prevent large losses should inflation accelerate. There are two aspects of indexation to be kept in mind. First, there is an intertemporal consideration involving claimants in different time periods. Over the long run, the trigger used to revise payment levels must keep pace with the average pace of inflation. In the past, Chile has tied payment levels to the minimum wage but adjustments in the minimum wage have not kept pace with overall wage inflation. This eroded the value of UI benefits and reduced the replacement rate (See Table III-3 below). Second, administrative considerations enter any proposal to adjust payment levels after they have been initially established. Compensating these

¹ Three observations are missing from these comparisons: Germany in 1991 (due to reunification and the associated change in geographic scope of national data) and Ecuador in 1999 and 2000 (due to late reporting in the IFS).

² The length of this period will depend both upon the base period used to establish the average wage prior to separation and on the duration of benefit reciprocity. The present discussion is illustrative. The basis of the statement in the text will become apparent after the discussion of UI benefits and benefit duration has been given below.

losses would add to administrative burdens, particularly if there were frequent changes in payment levels. Annual indexation adjustments are common in UI programs.

Unemployment

Temporary and permanent interruptions to employment and the associated loss of labor market earnings are important risks for Chilean workers. Within the past forty years there have been three episodes of serious recession where unemployment increased sharply: 1973-1975, 1980-1981 and 1998-1999. During each episode, the annual unemployment rate increased by 50 percent or more and average unemployment duration lengthened noticeably. For many, increased unemployment caused large decreases in labor market earnings and decreases in family well being.

Chile is fortunate in having two labor force surveys that provide detailed labor market information. A survey of employment and unemployment in the greater Santiago area was initiated in 1960 while the national survey extends from 1966. Since 1966 national unemployment in Chile has averaged 9.6 percent of the labor force. Table A1 in Appendix A displays time series of annual unemployment rates. The national survey is conducted monthly with information published for overlapping three month intervals. The survey of Santiago is conducted quarterly but with greatest continuous detail for June of each year. In the national data, June is a month of high unemployment. The May-June-July unemployment rate measured as a ratio to the annual rate had an average value of 1.068 for the years 1986 to 2001. Note also in Table A1 that the national survey was not conducted during 1973 and 1974.

Chart 1 displays annual unemployment rates for Santiago and for Chile based on data from Table A1. The three periods of high unemployment coincide in the two series (1975-1979, 1982-1985 and 1999-2001) with the highest rates for both series observed in the early 1980s. Some noticeable contrasts are apparent. The unemployment rate in Santiago is the higher of the two during 1968-1972 and then again between 1983 and 1991. Finally note that the increase in unemployment between 1998 and 1999 was much larger in Santiago than nationwide. During 1999-2001 their averages were 13.5 percent and 9.5 percent respectively. For the 33 years where both rates are available, the averages were more similar, 11.0 percent for Santiago and 9.7 percent for Chile.

Unemployment has much more serious consequences for affected workers and their families when it is of long duration. Table III-2 presents selected information, showing data on the duration of incomplete spells. Each column displays percentage distributions according to five duration intervals along with average unemployment rates for the indicated years. The table is designed to make three comparisons: 1) national data with Santiago data for 1992-1995, 2) Santiago in 1968-1969 compared to 1993-1994 and 3) Santiago in 1978-1979 compared to 2000-2001. The latter two pairings allow one to make comparisons for years with similar unemployment rates. If unemployment duration has been changing in a systematic manner, one would expect to observe consistent patterns for the latter pairs.

Two comments about the Table III-2 data seem appropriate. First, long duration unemployment is more concentrated in Santiago than elsewhere in Chile. Even though the unemployment rate was lower in Santiago during 1992-1995, the percentage with duration of one year or longer was much higher (8.0 percent compared to 2.5 percent). Second, there is no apparent trend of increasing average duration in Santiago. For the two periods of low unemployment, the percentage of spells lasting 7-12 months and more than 12 months were both higher during 1968-69 than during 1993-1994. For the two periods of high unemployment, the percentage with duration of more than 12 months was also higher in the earlier 1978-1979 period than during 1993-1994 while the 7-12 month percentages were similar. Overall, these duration distributions do not suggest that unemployment duration has been increasing in greater Santiago.³

One other aspect of measured unemployment duration in Santiago should be noted. Detailed tabulations of the duration of individual spells have been done for each of the 40 years from 1962 to 2001.⁴ For every year there is a heavy loading of spells at 26 weeks and at 52 weeks. On average, these two single week intervals each accounted for about 8 percent of all incomplete spells recorded in the surveys. There was no trend for the loadings on these two intervals, but both loadings were larger during the 1970s and 1980s than during the 1960s and 1990s. This pattern mirrors the pattern of unemployment rates by decade. During years of high unemployment, proportionately more unemployed

³ A more detailed investigation of the unemployment data from Santiago is being undertaken by Claudio Montenegro (2002) within this project. Some of his findings are discussed below.

⁴ The distributions appear in Table 1 of Montenegro (2002).

people in Santiago report spells of exactly six and twelve months duration than during years of low unemployment.

An analysis of unemployment in Santiago is also being conducted by Montenegro (2002). Working with annual data that extend back to the early 1960s, he has documented contrasting patterns between the economic downturns and subsequent recoveries of the late-1970s and the mid-1980s. His analysis tracked not only unemployment rates but also rates of unemployment occurrences and average unemployment duration. He also shows there was a close relationship between the unemployment rate and unemployment duration in Santiago between 1974 and 2001.⁵ In his analysis, the downturn of 1974-1975 was characterized by major increases in the inflow rate whereas the downturn of 1982-1984 was characterized by a large increase in unemployment duration. He also argues that the recovery from the 1974-1975 recession was characterized by a greater number of labor market mismatches when compared to the recovery of the mid 1980s. Thus average unemployment duration remained high in the late 1970s despite the economic recovery whereas the recovery in the 1980s was more balanced with large reductions in both the rate of unemployment occurrences and average duration. Montenegro's analysis provides a more structural interpretation for the duration data shown in Table III-2.

To summarize, three comments about unemployment in Chile seem appropriate. 1. Unemployment affects a sizeable share of the labor force. The national unemployment rate averaged about 10 percent over the past four decades while in Santiago it averaged about 11 percent. The percentage of the workforce experiencing unemployment sometime during a typical year may reach 20 percent and even higher in years of high unemployment.⁶ 2. Unemployment of long duration is more concentrated in Santiago than generally throughout Chile. 3. For periods with comparable unemployment rates, there has been no obvious pattern of increased unemployment duration in recent years vis-a-vis earlier years. In fact, long duration was more prevalent in the late 1970s and early 1980s than in more recent years.

While data from labor force surveys provide invaluable information on Chilean unemployment, there are at the same time important gaps in the available data. One gap

⁵ See Figure 3 in Montenegro (2002).

⁶ This conjecture is based on U.S. work experience data that report both spells and persons with unemployment as well as total weeks of unemployment during a given calendar year.

is information on recidivism in unemployment spells. Duration is measured per (incomplete) spell rather than as total annual weeks of unemployment. People with two or more spells per year probably experience much longer average (annual) duration than suggested by the duration data displayed in Table III-2 and examined by Montenegro. A second gap pertains to the link between unemployment and household income. At least two considerations are pertinent here. 1. For some, unemployment may be anticipated and a compensating wage adjustment may occur raising hourly pay in recognition of the risk of unemployment. This aspect of self-insurance undoubtedly is important for some households, but its empirical importance in Chile is not known. 2. The contribution of the earnings of the unemployed worker to household income is also important to know. Unemployment among secondary workers has smaller consequences than that of the primary breadwinner.

It is clear that some workers, particularly in the Santiago area, experience a large loss in earnings when they experience long spells of unemployment. In periods of high unemployment those with spells lasting six months or longer represent 30 to 40 percent of the total, at least in Santiago. The corresponding national percentage may equal or exceed 25 percent. These long spells undoubtedly cause major reductions in household income in many situations. Unemployment insurance (UI) would seem to have a potentially important role to play in providing partial earnings loss replacement for such workers and their families. These situations fit the traditional rationale for providing cash benefits through a UI program.

Provision of cash benefits through UI can also be justified using the framework developed in Chapter I. To the extent that unemployment is unanticipated and duration is short, it is appropriate to consider three instruments as the primary means for mitigating its consequences: coping, self insurance and self protection. Reliance on the latter two instruments would be increasingly appropriate as the frequency of occurrences increases. However, to the extent that unemployment is of long duration and causes medium and large losses in family income, market insurance and pooling are the appropriate instruments. As described above, Chile has experienced three periods of sharply increased unemployment over the past 40 years. Given the infrequency of the downturns, the associated spells were largely unanticipated and family income reductions were large.

Thus, using the risk management-social protection framework developed in Chapter I, providing wage loss benefits through unemployment insurance is appropriate.

B. Social Protection for Labor Market Participants

Chile has a well-established a system of employment protection and income support payments to address problems of job insecurity. Employment security legislation (ESL) requires employers to provide advance notice of separations and mandates severance pay unless the dismissal was for “just cause.” For those who become unemployed, cash support may be obtained through unemployment insurance (*subsidio de cesantia*), severance pay (*indemnizaciones por anos de servicio*) and in some circumstances through family support (*asignaciones familiares*). Traditionally, large numbers of the unemployed have also participated in temporary jobs programs. In recent years, the numbers and associated expenditures under temporary jobs programs have been much larger than for those compensated by unemployment insurance (UI).

The individual elements of Chile’s system of employment protection and income support have undergone numerous revisions over the past 40 years. The system continues to evolve in the present decade as illustrated by the changes in UI which started to be implemented in October of 2002.

The safety net system established in Chile pertains to workers in the formal sector working under explicit labor contracts. This group accounts for roughly about 55 percent of the total labor force. Recent estimates reported by Arenas de Mesa and Sanchez (2001, Table 7) suggest that about 3.0 million employed persons (out of 5.4 million total employment) were subject to pension contributions in 2000. Arenas de Mesa and Sanchez also show that coverage is much more extensive among dependent workers than independent workers, roughly 74 percent and 7 percent respectively in 2000.

The issue of coverage is important since noncovered workers usually do not participate in employment protection and income support programs. Yet noncoverd workers experience substantial job insecurity and unemployment. A recent World Bank report on Latin America (De Ferranti, et.al., 2000, Tables 5.3 and 5.4) shows that the risk of unemployment is at least as high for workers in the informal sector as for those with

formal labor contracts (data from Mexico and Argentina) and while short run income variability for the self-employed (covering most informal workers) is consistently higher than for formal salaried workers (data from Chile and five other countries).

Job Security

Detailed summaries of the evolution job security provisions in Chile since 1960 have been given by Pages and Montenegro (1999), Montenegro (2002) and Edwards and Edwards (2000). Seven distinct statutory regimes were identified by Pages and Montenegro while Edwards and Edwards emphasize five regimes. Although the time interval for advance notice that must be given by employers has remained constant at one month, severance pay requirements have undergone several modifications. At present, the maximum payment of severance is for 11 months of wages, but the maximum was five months between 1980 and 1990. The types of terminations that confer eligibility for severance pay have also changed. At present, one can be compensated for dismissals other than for "just cause" with economic conditions recognized within the ambit of "just cause." A worker can be reinstated and/or the employer can be subjected to financial penalties if "just cause" is not established. Eligibility conditions were much more restrictive during 1980-1984 but much less restrictive during the 1966-1973 period.

Pages and Montenegro (1999) have developed an index of employment protection rigidity that extends from 1960. The most restrictive period was from 1967 to 1974 while the least restrictive period was from 1960 to 1966 (years of employment at will) and from 1978 to 1984. At present, the Chilean provisions still appear restrictive in the larger comparative context provided by similar measures for countries of the European Union.

Unemployment Insurance

Chile established unemployment insurance in 1937. Over the program's history, the benefit provisions of Chilean UI have fallen into four major phases: the years up to 1974, 1974 to 1985, 1985 to 2002 and the new program being initiated in October 2002. The three earlier phases are reviewed and summarized here while the new program is examined in Section C. Statistical information drawn from the three earlier phases is presented in Table III-3 and will be referenced throughout the following discussion.

Details of key benefit and financing provisions are shown in Table III-4. This table shows two sets of information for the first phase of the program because the provisions pertaining to wage employees and salaried employees were quite distinct. All four phases are covered by Table III-4.

Phase 1

The original program had distinct eligibility, benefits and administration for wage workers and salaried employees. The program for salaried employees commenced in 1937 while wage earners were first covered in 1953. Several individual funds served specific groups. Wage earners who became unemployed could draw benefits for up to six months or until they exhausted monies resident in individual accounts otherwise dedicated to payment of severance pay. Severance would normally be received after achieving one of the following individual employment milestones: thirty years of service, age 60, invalidity (permanent disability) beneficiary or retiree. Thus monies came from an individual account whose principal was usually reserved for support in old age. Eligibility required 156 weeks of covered employment prior to the job separation.⁷ Payments to unemployed wage earners replaced 75 percent of lost wages and benefit duration was typically short, e.g., 2.2 months in 1970.⁸ This program was administered by the Social Insurance Service and supported by employer payroll-based contributions.

The program for salaried employees required at least 12 months of contributions in salaried employment. Payments were flat rate, equal to 75 percent of the minimum salary for Santiago, and potential duration was most typically 90 days (or 180 days in special circumstances). This program was administered by specially established funds and supported by employee contributions.

This UI system was small scale. Note in Table III-3 that the average number of beneficiaries ranged from 3,800 to 4,800 per month between 1967 and 1970 and the number only reached 5,100 in 1973, its last full year of operation. It routinely compensated fewer than five percent of the unemployed in any given month.

⁷ Eligibility had other traditional requirements, e.g., registration as a job seeker, able and available for work, unemployment due to an unprejudicial employer separation, and no refusal of suitable work (defined as paying wages more than half of the wages of the previous job). These provisions have not changed since the 1960s.

⁸ Total months compensated and first payments in 1970 appear in Tables 40 and 41 respectively of “Seguridad Social Estadísticas, 1970.”

Phase 2

Several major reforms to UI became effective in August 1974. The various programs for wage workers and salaried employees were merged and common provisions pertaining to eligibility and benefits were implemented. Potential entitlement required 52 weeks of coverage during the previous two years. Monthly benefits were determined as 75 percent of taxable monthly earnings during the last six months of employment. Minimum and maximum monthly benefits were established at 160 and 360 percent of the legal minimum salary for Santiago. Both limits changed automatically with changes in the minimum salary. Benefits could be paid up to 90 days with extensions to one year sometimes possible. Table III-3 shows that the reciprocity rate (NBen./Unemp.) ranged between 0.165 and 0.238 during the years when this phase was fully in force, i.e., from 1976 to 1984. Low coverage of workers with formal contracts has contributed to low reciprocity in Chile throughout all phases of its UI program.

Tying the minimum and maximum benefit to the minimum wage provides automatic indexation but one dependent on decisions about adjustments in the minimum wage. Between 1975 and 1984 the minimum wage was adjusted upward but much more slowly than overall wage adjustments. As a consequence, the ratio of the maximum benefit to the average monthly wage decreased from 0.447 in 1975 to 0.167 in 1984. During these years an increasing share of recipients were paid the maximum so that by 1984 the ratio of the average benefit to the maximum benefit had reached 0.928. Over these same ten years, the ratio of monthly benefits to the monthly wage (the replacement rate) decreased from 0.219 to 0.155 (Table III-3).

During Phase 2 the program was administered by the Superintendencia of Social Security. Financial support for the UI program (and for family allowances) was provided by the general budget appropriations and channeled through the Superintendencia.

Phase 3

The third phase of the UI program commenced in May 1985 when the preceding benefit structure was replaced with a specific form of flat benefit structure. As was noted, by 1984 most beneficiaries were paid the maximum benefit. The new benefit structure paid one level of flat benefits for the first 90 days, a lower level for the next 90 days and a third (even lower) level for days 181 through 360. Initially the levels were 6,000, 4,000

and 3,000 pesos per month. This three tiered structure with twelve months of potential payments has lasted until the present.

While statutory payment levels have been adjusted periodically since 1985, the adjustments have been much smaller than the growth in monthly wages. The most recent adjustment occurred in January 1996 when the present (2002) levels of 17,338, 11,560 and 8,669 pesos became effective. Because of more rapid growth in average wages, the average replacement rate declined continuously after 1985, reaching 0.044 in 2001.⁹

Benefit recipiency also declined during the program's third phase. The recipiency rate was 0.163 in 1986, but then descended more or less continuously and eventually reached a low of 0.048 in 1994. Recipiency has increased since 1994, most noticeably when unemployment rose in 1999. Even with the recent increases, the recipiency rate has consistently fallen below 0.100 in the latest years covered by Table III-3. Monthly beneficiaries averaged close to 50,000 during the three years 1999-2001.

While these monthly averages are modest compared to the scale of unemployment, beneficiaries have exhibited reasonably long average durations. Duration estimates can be derived for all years since 1980 from the ratio of total annual months compensated to annual first payments. The annual averages ranged from 6 to 13 months with longer average duration observed in the 1980s than the 1990s, i.e., averages of 10.2 months during 1980-1989 but 6.9 months during 1990-1999. While data on final payments (exhaustions) are not routinely published, it is clear from the averages that a substantial fraction of UI beneficiaries use up their full benefit entitlements.

An inference about long benefit duration can also be made on the basis of average monthly benefits. Between 1996 and 2001 average benefits in Table III-3 were generally between 11,000 and 12,000 pesos in a payment structure where the three levels of monthly payments were 17,338, 11,560 and 8,699. From the annual averages it is apparent that more months were compensated at the lowest level than at the highest level, meaning that large numbers collected benefits for more than six months.¹⁰

⁹ The small increase in the replacement rate in 2000 reflects high payments made in September. For the other eleven months the average benefit was between 11,000 and 12,000 pesos.

¹⁰ Consider an example where equal numbers of months are compensated at all three levels. In this case the overall average would be 12,522 pesos $((17,338 + 11,560 + 8,669)/3)$. Since the average is lower than 12,522 it implies that more months are compensated at 8,669 than at 17,338.

Questions about unemployment duration and UI benefit duration are central to the design of any UI program. Calculations with data from the Santiago suggest that the average duration of unemployment ranged between 20 weeks and 40 weeks for most years between 1962 and 2001. The averages for 31 of these 40 years fell into this range, and the 40-year average was 27.7 weeks. It is clear in Table III-2 that a substantial share of spells last beyond 26 weeks (7-12 months and more than 12 months). It is also clear that a substantial share of the unemployed normally collect UI benefits for more than six months. We will return to the topic of unemployment duration and UI benefit duration in the context of the description of the new UI program to be implemented starting in 2002.

The product of the reciprocity rate and the replacement rate yields an index of benefit generosity. This index appears in the column headed “G Generosity” in Table III-3. High values of G signal greater generosity achieved by a combination of high reciprocity and/or a high replacement rate. The intuitive interpretation of G is that it shows the share of lost wages among the unemployed that is compensated through UI.

Generosity indices have been estimated for several countries. These are derived, discussed and displayed in Vroman (2002) and Vroman and Brusentsev (2001). Table III-5 (to be examined in the next section) shows average generosity indices and related data for Chile and several other countries during the 1990s.

Historically, the UI program in Chile has operated with low generosity. Table III-3 displays 24 annual estimates of G. Seven exceed 0.020 while fourteen fall below 0.010. The low values are concentrated in the later years covered by the table. In recent years, the UI program in Chile has replaced less than one percent of the wage losses caused by unemployment. In fact, the generosity index has averaged 0.004 since 1990. Low reciprocity and low wage loss replacement have both contributed to this outcome, averaging respectively 0.072 and 0.059 since 1990.

Payments to the unemployed during the third phase of the UI program have been financed through the general budget. To this point in time, program administration has been undertaken by the Superintendencia de Seguridad Social. Partly because the UI program is inexpensive, its funding has not generated much controversy. The Superintendencia has supervised funds for both unemployment benefits and family

allowances. Note in Table III-3 that annual UI benefit payouts exceeded 7.0 billion pesos in just two years (1983 and 2000) and payouts have never reached 8.0 billion pesos.

Comparative information on UI generosity

Table III-5 displays comparative information on benefit generosity from Chile with twelve other countries. The data refer to ten year averages of benefit payments for the years 1990 to 1999. Besides Chile, the table shows information for three other Latin American countries (Argentina, Brazil and Uruguay) and nine OECD countries.

An obvious contrast exists between the Latin American and OECD countries. For three Latin American countries the generosity index falls below 0.030 whereas every index for the OECD countries exceeds 0.100 and for six of the nine it exceeds 0.250. Except for Brazil where the reciprocity rate and the replacement rate are both the highest among the four countries, less than three percent of lost earnings is compensated by Latin American UI programs. Chile's program has the lowest overall generosity index. As noted previously, the reciprocity rate and the replacement rate are both less than 0.100.

Benefit generosity combines with the unemployment rate to determine the cost of UI benefits expressed as a percent of payroll (B%). Observe in Table III-5 that unemployment rates in the Latin American countries and OECD countries exhibit similar variation. Japan was the only country with an average unemployment rate below 5 percent during the 1990s. However, because generosity is so much lower in the four Latin American countries only Brazil had UI benefit costs that approached 1.0 percent of payroll. For Chile, costs were only 0.030 percent of payroll.

Among six of nine OECD countries benefit costs averaged 2.0 percent of payroll or higher during the 1990s. France and the Netherlands had the highest costs, close to 5.0 percent of payroll. Note that for six OECD countries, the generosity indices ranged from 0.270 to 0.833. The three low cost OECD countries (Japan, the United Kingdom and the United States) experienced lower costs due both to low generosity indices (ranging from 0.114 to 0.151) and to relatively low unemployment rates. Japan and the United Kingdom had similar generosity indices (0.151 and 0.149 respectively), but reached by contrasting configurations of reciprocity rates and replacement rates. Compared to the United Kingdom, Japan had much lower reciprocity but much higher wage loss replacement.

From the perspectives of both the time series data of Table III-3 and the comparative cost data displayed in Table III-5, Chile during Phase 3 of its UI program has operated a very modest program. The last year that reciprocity exceeded 0.100 was 1989 while the replacement rate has fallen below 0.100 in every year since 1987. Chart 2 provides a time series display of the three individual factors that combine to determine the costs of UI: the unemployment rate, the reciprocity rate and the replacement rate. Observe in the most recent three years that when unemployment increased, reciprocity also increased while the replacement rate continued to hover close to 0.050. Comparatively few are compensated through UI in Chile, and even those compensated typically experience wage loss replacement of less than ten percent.

Other measures for the unemployed and benefit overlaps

Unemployed workers may participate in training measures or temporary jobs programs. When unemployed persons register as job seekers with local municipal offices (Oficina Municipal de Colocacion), personnel in these offices may recommend enrollment in training or retraining or participation in a temporary jobs program. Access to training is facilitated by preferential entry criteria for the unemployed. Usually temporary jobs programs are locally administered, and refusal to participate constitutes grounds for terminating UI benefits.

Participation in temporary jobs programs has involved many more of the unemployed than the numbers paid UI benefits in recent years. This is probably due to the comparative ease of entry. Personal declarations of unemployment without employer-provided documentation of a job termination have been sufficient for enrollment. This policy is being modified to require a termination document (finiquito). It is anticipated that the change will greatly reduce participation in temporary jobs programs.

Family allowances and medical assistance are also available for the unemployed. Family allowances (asignaciones familiares) are paid as cash benefits with a fixed monthly amount per dependent, but support levels are very modest, much lower than Phase 3 UI benefits. Eligible families must have children younger than 18 years.¹¹

¹¹ Eligibility for family allowances among families with children enrolled in college is extended to age 24 and without age limit among families with disabled children. Initial eligibility commences at the fifth month of pregnancy for families expecting their first child.

Medical benefits include maternity benefits as well as various medical services. Both measures are widely available in Chile, and the unemployed represent but one group of users. Families experiencing unemployment and meeting income eligibility criteria may receive family allowances on an emergency basis. Benefits are to terminate when the “emergency” (unemployment) ends. During 2000 family allowances were paid to 2.7-2.8 million households per month at a starting rate of 3300 pesos per dependent per month. However, information on payments to families with unemployment has not been found.

As noted, severance pay cash payments are made to some workers following a job termination. The maximum payment for a person with sufficient seniority is 330 days or 11 months at the level of their ending monthly salary. Access to severance pay depends upon the circumstances of the job termination. If an employer can demonstrate “just cause” for the dismissal there is no obligation to pay severance. Disputes often arise as to the circumstances of the separation, and decisions regarding compensation are often the result of court proceedings. Rulings that favor claimants add penalties to the basic severance award.

Data have not been found that show numbers of recipients, total spending and average benefits for temporary jobs programs, training programs or severance pay. The administration of severance pay is an employer responsibility and payments are made as lump sum awards. Nothing has been found to indicate the degree of employer compliance with the statutory obligation to make severance payments.

Overlaps between UI and other cash benefits and services are undoubtedly present in Chile. As in any system of social protection, two general types of overlaps can be identified: simultaneous and sequential. Two simultaneous overlaps can be identified although their prevalence is not known. Severance pay and UI benefits may be received at the same time. This is perfectly legal given eligibility criteria for the two payments, i.e., severance compensates workers for past service while UI compensates for post-separation unemployment. However, the simultaneous payment undoubtedly delays reemployment for some due to an income effect arising mainly from lump sum severance payments. The size of this effect could be reduced if an offset were instituted so that the

payment of severance caused eligibility for UI to be deferred.¹² The second simultaneous overlap is between family allowances and UI. Since the bases for entitlement for UI and family allowances are different (for family allowances, the presence of children and, in some instances, low income occasioned by unemployment), an overlap of payments is unavoidable under present program eligibility criteria. Families with children who experience unemployment will experience larger disincentive effects due to the simultaneous receipt of the two cash benefits. The disincentive would be proportionately larger for those paid low wages (for whom the UI replacement rate would be higher) and for those with more children (for whom the family allowance would be larger).

Sequential overlaps appear to be less common. In the past, temporary jobs provided through municipal offices, have been available to the unemployed. Refusal to participate in a temporary jobs program can cause a disqualification from UI benefits. Common to both UI and temporary jobs programs is the absence of a follow-on program for those who reach the end of their entitlement. Unless reemployment is secured, income from the temporary support program ends with no follow-on program available. This undoubtedly spurs increased efforts to secure reemployment by participants, but it also implies increased hardship for those unsuccessful in securing new jobs.

Serious economic hardship is experienced by some of the long term unemployed. There is no broad-based income support program targeted on the low income persons and families such as unemployment assistance or social assistance. Some families with unemployment undoubtedly receive family allowance payments on an emergency basis, but the prevalence and size of emergency payments is not readily documented. While this situation helps to ensure strong incentives to secure new jobs, it also leads to increased poverty for some families. This hardship is likely to increase during economic contractions when unemployment duration lengthens and the flow of new job openings is lower than during other periods.

¹² Two possible approaches could be considered. Each month of payments included in a severance pay award could either defer UI eligibility or reduce UI eligibility by one month. For example, an award of seven months of severance would either reduce UI eligibility by seven months or defer UI eligibility for seven months. Under either approach less UI would be paid and incentives to return to work sooner would be improved.

Although it is difficult to document, it is likely that economic hardship is greatest among the unemployed who formerly worked in the informal sector.¹³ Such persons cannot present evidence of a job termination (a finiquito), and thus cannot meet eligibility criteria for UI benefits (or severance pay). While such persons may have participated in temporary jobs programs in the past, we understand that eligibility in the future will be restricted to persons with a formal notification of their job termination. It seems there is a need for a program that provides cash benefits (and/or access to public jobs) for the unemployed in Chile with low income.

Several countries support programs that serve the low income unemployed. Two arrangements are of particular note. First, several West European countries, e.g. France and Germany, provide a second, back-up tier of support through Unemployment Assistance (UA). The UA program is focused on the unemployed with low income, and access is provided both to inexperienced unemployed who do not qualify for UI benefits and for others who have exhausted UI benefits. In countries with coordinated UI-UA systems of unemployment protection, UA benefits are lower than UI benefits. At any point in time, the number of UA recipients approaches and may even exceed the number of UI recipients.¹⁴ Thus some of the long term unemployed move to UA upon exhaustion of UI benefits.

The second arrangement is to provide Social Assistance (SA), means tested income support, for the long term unemployed. In Bulgaria and Slovakia, UI is available for a maximum of 12 and 9 months respectively and benefit exhaustions are common. Both countries provide income support through the SA program. Recipients are required to register with the labor exchange and to accept temporary public jobs if offered. SA support levels are lower than for UI, but substantial numbers of unemployed have participated in selected countries.

Providing a second tier of support for the long term unemployed has encountered serious problems of long term dependency. To some extent, this reflects a problem of moral hazard whereby some individuals artificially prolong their unemployment spells to

¹³ Unfortunately household surveys like the CASEN (Encuesta de Caracterización Socioeconómica Nacional) do not distinguish employed and unemployed persons according to formal or informal sector.

¹⁴ In both Great Britain and Ireland the number receiving UA has averaged some three to four times the number receiving UI benefits in recent years.

continue receiving payments. To offset these effects, policies to “activate” the unemployed have been emphasized by the OECD for more than a decade but with only limited success. In both Australia and New Zealand several initiatives to reduce the extent of long term dependency have been mounted since the late 1980s. Details of policy initiatives in Australia are given in Vroman (2002) and in Vroman and Brusentsev (2001). Even with SA programs that provide modest levels of income support, some persons appear resistant to activation. Effective policy probably requires low support levels for second tier unemployment benefits and/or time limits that force individuals to find other support after a maximum period in benefit status has been realized.

While Chile does not provide a regular second tier of support for the long term unemployed, a program to provide such support must be carefully designed. Structural components should probably include the following: low support levels, active monitoring of work search and limited potential benefit duration. The net effect of the three elements suggests that substantial resources would be needed for program administration were an ongoing second tier program to be implemented. The presence of a large informal sector in Chile provides another argument for proactive program administration to ensure that benefit recipients are indeed unemployed as opposed to working in the informal sector.

C. The New Unemployment Insurance Program

Starting in October 2002 Chile began replacing its present UI system with a new system that places primary emphasis on access to individual accounts as the basis for payments.¹⁵ Beneficiaries will make withdrawals from individual accounts managed by a freestanding administrative entity selected through a competitive tender. At the time when workers renew their formal labor contracts, they will automatically be transferred to the new UI system. Full conversion is expected to take about seven years. Thus UI protection will evolve gradually while each worker will transfer on a specific date.

¹⁵ Details of the new UI system are based on a description of the law (Ministerio del Trabajo y Prevision Social, 2001) and a technical memorandum (“Seguro de Cesantia, Informe Technico, August 2000,”), both obtained at a CIDESS conference held in Santiago in October 2001.

Key provisions

The new UI program contrasts with the present program in several ways. Table III-4 provides a side-by-side comparison of the new program with the present program. Key contrasts include the following.

1) There is a waiting period of one month. In the pre 1974 phase of UI, the waiting period was three days, but it was eliminated in the 1980s. Instituting a one month wait is one of several design features intended to "incentivise" beneficiaries. The waiting period is akin to a co-payment in insurance. Expenditures during the first month of unemployment will be fully financed from the worker's own resources. Requiring a one month wait will discourage worker-initiated turnover, and will hasten reemployment since no UI payment will be available.

2) Maximum benefit duration will be limited to five months, compared to 12 months in the current program. Having shorter potential duration is expected to encourage faster return to work than under the present program.

3) Benefit levels will be linked to past earnings. For each recipient, the level of payments decreases with each successive month of benefits. The first month provides 50 percent wage replacement (subject to a maximum), but then replacement decreases by five percentage points each month, reaching 30 percent in the fifth month. This declining scale is also intended to encourage more active work search.

Monthly benefits vary between a statutory minimum and a maximum. Those with above-average earnings in the twelve months prior to the job separation (the basis for benefit calculations) will be paid above-average monthly benefits. The maximum for the first month of 125,000 pesos represents about 50 percent of the average monthly wage in 2001, a payment level seven times higher than the previous maximum of 17,338 pesos. The new minimum benefit (65,000 pesos in the first month) is also substantially higher than the previous maximum.

Benefit payment levels will change automatically each year through indexation. On February 1, benefits will be increased by 100 percent of the change in the annual average of the index of consumer prices from the previous year compared to two years previously. The minimum and maximum for all five months in benefit status are to be

adjusted in the same proportional manner. This annual indexation of benefits is both appropriate and common in UI programs.

Compared to its predecessor, the new UI program will have shorter benefit duration but higher monthly benefits. Because the increase in average monthly benefits is much larger than the decrease in average duration, it seems clear that total payments will increase. Overall order-of-magnitude changes may be something like the following: monthly benefits - six time higher than at present (66,000 versus 11,000 pesos), average benefit duration - half of present duration (3.5 months versus 7.0 months), and total payments - three times higher than at present (231,000 per recipient versus 77,000 pesos per recipient). In any given month, fewer will receive benefits but average benefits will be much higher.

The bases for making withdrawals from the two funds differ. Workers can withdraw from their individual accounts for not only unemployment arising through layoffs and other separations causing unemployment but also due to disability, retirement and death. In the latter situations, the insured person is no longer active in the labor market but access is guaranteed to the person or a designated heir. Access to resources of the common fund, in contrast, is limited to situations of unemployment among persons eligible for UI but with insufficient balances in their individual accounts.

4) The new UI program will be financed by payroll taxes levied on employers and employees at rates of 2.4 percent and 0.6 percent respectively for a combined rate of 3.0 percent.¹⁶ This marks a radical departure from current financing which is done through the general budget with monies transferred by the Superintendencia of Social Security to two funds, one for unemployment and one for family allowances.

5) Contributions are deposited into two accounts: individual accounts (cuentas individuales) and a common fund (fondo solidario). All of employee contributions and 1.6 percentage points of the employer contribution go to the individual accounts while the remaining 0.8 percent of the employer contribution goes to the common fund. The latter is to finance payments to those eligible but whose individual account balances are insufficient to cover benefit payments.

¹⁶ These contribution rates apply to workers with indefinite duration contracts and those with fixed duration contracts. For others working by task (obra o faena), the employer contributes the full 3.0 percent.

6) The new program is effectively a funded system in contrast to the present system which operates with annual appropriations, a pay-as-you-go system. It implies several new aspects of financial administration: deposits and withdrawals from individual accounts, updating information when workers change employers, investing individual account balances and tracking transactions involving the common fund. These activities are akin to the administration of individual accounts in the present pension system. In fact, regulatory supervision of the new UI administrative entity will be undertaken by the regulatory body that now oversees the pension system (Superintendencia de Administradoras de Fondos de Pensiones).

Statutory safeguards will help to ensure that the new UI system will avoid financing difficulties. Since withdrawals from the individual accounts are automatically limited by the size of each person's balance, threats to solvency would arise from actions affecting the common fund. Here there are two safeguards. First, withdrawals by any individual from the common fund will be limited. During a given five year period, a person can have only two periods of benefit withdrawals. Effectively this means a limit of eight or nine months of benefits per person financed by the common fund during a given five years. Second, aggregate withdrawals in any given month cannot exceed one-fifth of the existing balance in the common fund. If total claims against the common fund are larger, all claims will be reduced proportionately to make their sum add up to one-fifth of the balance.

In the determination of severance pay, UI benefits are explicitly recognized. The amount of UI paid following a job termination offsets the employer's obligation to pay severance on a peso-per-peso basis.

The new UI program is to have an advisory body (Comision de Usuarios) to ensure appropriate program administration. Made up of three representatives from labor, three from employers and headed by an academic, the Comision will ensure that the administrative entity (Sociedad Administradora) undertakes proper and accurate payments, provides accurate information on financial management of the funds and uses appropriate methods of administration of benefits and collections. The Comision is to issue an annual report on the activities of the Sociedad.

While the new UI system represents a sharp departure from the present one, several elements of continuity should also be noted. Unchanged will be: the requirement to register as a job seeker, to be able and available for work and not to refuse offers of suitable work (still defined as work in the same occupation and paying at least half of pay from the previous job). Access to other parts of the Chilean safety net also will remain unchanged, e.g., family allowances and medical assistance.

Some questions

The preceding provides an overview of Chile's new UI program. Some questions about the new program and its place in the overall system of social protection remain.

1. How will access to individual accounts be controlled?

Creation of individual accounts will be followed by pressures to gain access to the assets held in the accounts. In most employment situations, workers will have more interest in this access question than their employers. A worker with a high rate of time preference might prefer immediate access to UI benefits rather than carrying assets over into retirement years. Collusion with employers to gain access to account balances could occur even when employers have a requirement to pay severance.

Brazil provides one example of how this situation could develop. A worker who is terminated can receive both UI benefits and severance pay. In situations of unjust dismissal, severance pay has two elements: access to assets in individual accounts supported by employer contributions and direct payment by employers to workers of the 40 percent fines levied on unjust dismissals. Chahad (2000) asserts that situations of worker-employer collusion have developed whereby the worker gains access to the principal in the severance pay account and the 40 percent fine is kicked back by the worker to the employer. The resulting arrangement increases labor turnover and provides early access to severance pay intended for retirement at no added cost to the employer.

Australia provides a second example of problems of coordination and moral hazard in accessing individual account assets. Its pension system has two elements: mandatory savings in individual accounts that provide for superannuation benefits at retirement and pension payments from the previous public scheme where eligibility is conditioned upon income. The coordination of the two systems has been imperfect with

the retirement (withdrawal) age for superannuation being younger than the retirement age in the public scheme. To the extent that superannuation assets are used up before reaching the public scheme's retirement age, the costs of the public scheme are increased since superannuation benefits are part of countable income used to determine the level of public pension benefits. Australia has also had to restrict the range of permissible "emergency" early withdrawals of superannuation assets.¹⁷ The net effect of these withdrawals is to leave less available when the retirement age for superannuation is reached and later when the retirement age for the public scheme is reached.

These experiences should be kept in mind as Chile implements its new UI program. It will require careful administrative oversight to ensure that applicants are indeed unemployed before granting access to their individual account balances.

2. Will coverage change?

Fostering increased employment in the formal (contractual) sector of the Chilean economy continues to present challenges. As noted earlier, roughly three fourths of dependent workers have formal labor contracts with attendant social security contributions, but less than ten percent of the self-employed make contributions. Low coverage of the self-employed has persisted for twenty years, and there is no obvious trend towards increased coverage.¹⁸

Implementation of the new UI program seems likely to reduce the attractiveness of contract sector employment. There will be a new payroll tax levied at a combined rate of three percent. Replacing general revenue financing with this payroll tax will increase the attraction of providing non-contracted employment among some marginal employers.

There will be an incentive for workers to secure coverage under the new UI program. However, absent some new force to increase the number of contract sector jobs, the likely result will be faster growth of non-contracted jobs.

How might coverage be increased? One potential avenue is through increased monitoring of compliance with required social security contributions. A full program might encompass the following components. Identify obvious instances of tax avoidance and then engage in negotiations to secure future contributions. Initially the negotiations

¹⁷ Details are provided in Section 6.2 of Ingles (1998) and Ross (1997).

¹⁸ See Table 7 in Arenas de Mesa and Sanchez (2001).

would be private but threats of prosecution and/or exposure in the media should be elements of a full compliance program. Amnesty for past tax avoidance in return for full future tax compliance could also be part of the bargaining stance assumed by the tax authorities in dealing with non-compliant employers. While the effects on revenues would be much larger for the pension system than for the UI program, expanded coverage of dependent workers and the self-employed as well as improved UI eligibility among dependent workers would also follow.

3. Support for workers without contracts?

Evidence of termination from a contract sector job (a finiquito) is needed for access to UI benefits under both the previous program and the UI new program. Should some form of support exist for unemployed workers without formal contracts? In the past some have participated in temporary jobs programs. However, access is now being restricted by a requirement that a finiquito be presented as evidence of termination.

One possibility would be to rely exclusively on a coping strategy wherein the absence of earnings would cause such a decrease in well-being that only short spells of unemployment could be tolerated. This would provide the maximum motivation to secure a new job. While this might suffice during periods of low unemployment, it would foster major hardship during periods of high unemployment when duration lengthens.

It would seem a need for some type of recession-related emergency jobs program exists. If wages were kept low, this would help to ration applications to those in greatest need. Payment of low wages would also help ensure that those who had elected to work in non-contract jobs were not unduly rewarded when the number of such jobs decreased during an economic downturn.

Assessment

Three features of the new system are particularly attractive. 1) It provides much more adequate levels of compensation than the present system. Average benefits will likely increase from about 11,000 pesos per month to, perhaps, 66,000 and the associated wage loss replacement rates are likely to increase from 0.05 to 0.25, or perhaps higher. Chilean UI has not had such high replacement rates in the past. 2) The new system has a strong system of automatic benefit indexation that will stabilize replacement rates at their

starting levels. Between 1975 and 1985 and again between 1985 and 2001 replacement rates declined for obvious reasons. In the 1975-1985 period payment limits were tied to the minimum wage which did not keep pace with overall wage increases. In 1985-2002 payment levels were adjusted only infrequently, again much less than wage growth. The current system will avoid this erosion as long as adjustments are tied to changes in the CPI as presently stipulated. 3) The new system has a rock sound financial basis. Several design features ensure adequate financing: limiting potential duration to five months, limiting each individual's access to resources of the common fund (at most two withdrawal periods every five years) and limiting the overall payout rate from the common fund (a maximum of one fifth of its current balance for any given month).

Negative features of the new system can also be identified. 1) Potential benefit duration of five months is short. The existing system has not compensated more than 10 percent of the unemployed in any year since 1989. Reducing maximum potential duration from one year to five months will further reduce average reciprocity rates among the unemployed. Many workers who actively seek work during their five months of entitlement will not be successful despite explicit design features to encourage early reemployment such as replacement rates that decrease from one month to the next. This problem will be especially apparent during recessionary periods when the private labor market will generate fewer new job openings than during other cyclical periods.

The administrators of the new UI program should monitor average benefit duration and benefit exhaustion rates. If both are "high," corrective actions should be considered. The most obvious would be to increase potential duration from the current five months to a higher level, e.g. eight months or even 12 months as during Phase 3.

2) The new system does nothing to enhance UI coverage within the labor force. The system is explicitly targeted on dependent workers where roughly three in four are now covered. Others are likely to remain outside the system as they presently remain outside the scope of the pension system. The potential access to UI benefits through individual accounts will probably not provide a sufficient attraction to have an important positive effect on coverage. Adding a new 3.0 percent payroll tax will increase pressures on employers to provide noncontract jobs. The lack of coverage, in turn, may have manifestations elsewhere in Chile's system of social protection, e.g., family allowance

caseloads and/or attempts to enroll in temporary jobs programs. The suggested improvements in tax compliance actions could help to improve this situation.

3) A final observation/question pertains to the balance of revenues and expenditures in Chile's the new UI system. It seems that the new system will generate annual revenues that, at a minimum, will be two to three times annual payouts. This inference is based on three considerations: the rate of payouts of the current system, the likely increase in the rate of payouts (higher benefits but shorter duration compared to the present system) and the likely revenues of the new system. Table III-3 shows that the payout rate has averaged about 0.05 percent of payrolls in the past ten years. Suppose this payout rate increases to 1.0 percent under the new system. The rate of inflow based on 3.0 percent of taxable payroll is likely be lower than 3.0 percent due to noncompliance, but much of noncompliance at the same time means there will be no associated liabilities for the new system. If revenues equal 2.5 percent of covered payroll there will be a substantial excess of revenues over expenditures on a year to year basis with exceptions occurring only during recessions.

The initial contribution rates for the participants are not fixed for all future years. Should the system be overfinanced, there will be ample opportunity to adjust benefit levels, potential benefit duration and/or contributions at a future time. For the initial years in a new system, it is certainly safer to err on the side of overfinancing. Benefits and/or taxes can be adjusted later should accumulations in the individual accounts and the common fund prove excessively large. Otherwise, the new UI system would in effect become a new mandatory retirement savings plan but one entitled Seguro de Cesantia.

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Appendix. Unemployment Rates in Chile

Table A1 displays annual unemployment rates for Chile and Santiago. The Santiago rates were taken directly from Table 1 in Montenegro (2002). The national rates from 1986 to 2001 were taken from the INE (Institute Nacional de Estadísticas) web site. For earlier years the information was taken from the ILO web site and from data published by the Banco Central and kindly supplied by Dr. Alejandra Cox Edwards. Note that there are no national data for 1973 and 1974. The pre-1986 data for most years refer to the October-December quarter. These data were adjusted for seasonality using seasonal factors operative during the 1986-2001 period.

Table III-1. Annual Inflation in Selected Countries and Chile, 1971 to 2000

| Annual Inflation, Percent | GDP Deflator, Group of Seven 1971-2000 | GDP Deflator, 11 Latin American 1971-2000 | GDP Deflator, Chile 1971-2000 | GDP Deflator, Chile 1981-2000 | Wage Inflation, Chile 1981-2000 |
|---------------------------|--|---|-------------------------------|-------------------------------|---------------------------------|
| Negative | 5 | 6 | 0 | 0 | 0 |
| 0 - 4.99 | 111 | 21 | 5 | 5 | 1 |
| 5 - 9.99 | 57 | 35 | 1 | 1 | 4 |
| 10 - 19.99 | 32 | 76 | 8 | 7 | 5 |
| 20 - 29.99 | 4 | 61 | 7 | 6 | 7 |
| 30 - 49.99 | 0 | 39 | 2 | 1 | 2 |
| 50 - 99.99 | 0 | 44 | 2 | 0 | 1 |
| 100+ | 0 | 46 | 5 | 0 | 0 |
| Median | 4.9 | 24.3 | 21.0 | 15.0 | 19.5 |
| Number | 209 | 328 | 30 | 20 | 20 |

Source: GDP deflator, International Financial Statistics Yearbook.

Wages, ILO Yearbook of Labor Statistics and Institut Nacional de Estadísticas (INE).

Latin American countries: Argentina, Bolivia, Brazil, Columbia, Costa Rica, Ecuador, Mexico, Paraguay, Peru, Uruguay and Venezuela.

Observations missing for Germany in 1991 and for Ecuador in 1999 and 2000.

Table III-2. Unemployment Duration in Chile and Santiago.

| Duration | Chile 1992-95 | Santiago 1992-95 | Santiago 1968-69 | Santiago 1993-94 | Santiago 1978-79 | Santiago 2000-01 |
|-----------------------|------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| To 1 Mon. | 27.1 | 33.8 | 27.9 | 33.6 | 17.0 | 20.7 |
| 2 - 3 Mon. | 34.0 | 27.6 | 20.6 | 28.9 | 18.2 | 24.8 |
| 4 - 6 Mon. | 23.6 | 18.0 | 21.6 | 18.4 | 21.0 | 21.9 |
| 7- 12 Mon. | 12.9 | 12.7 | 18.5 | 12.9 | 21.5 | 22.4 |
| GT12 Mon. | 2.5 | 8.0 | 11.5 | 6.2 | 22.3 | 10.2 |
| Unemp. Rate - Pct. | 7.1 | 6.4 | 6.3 | 6.2 | 13.9 | 14.0 |

Source: Data for Chile from the Institute National de Estadisticas (INE).
 Data for Santiago from the University of Chile. Unemployment rates
 are averages for the indicated periods. Duration intervals in percent
 The two bottom intervals for Santiago are up to five weeks and six
 to thirteen weeks.

Chart 1. Unemployment Rates in Chile and Santiago, 1960 to 2001

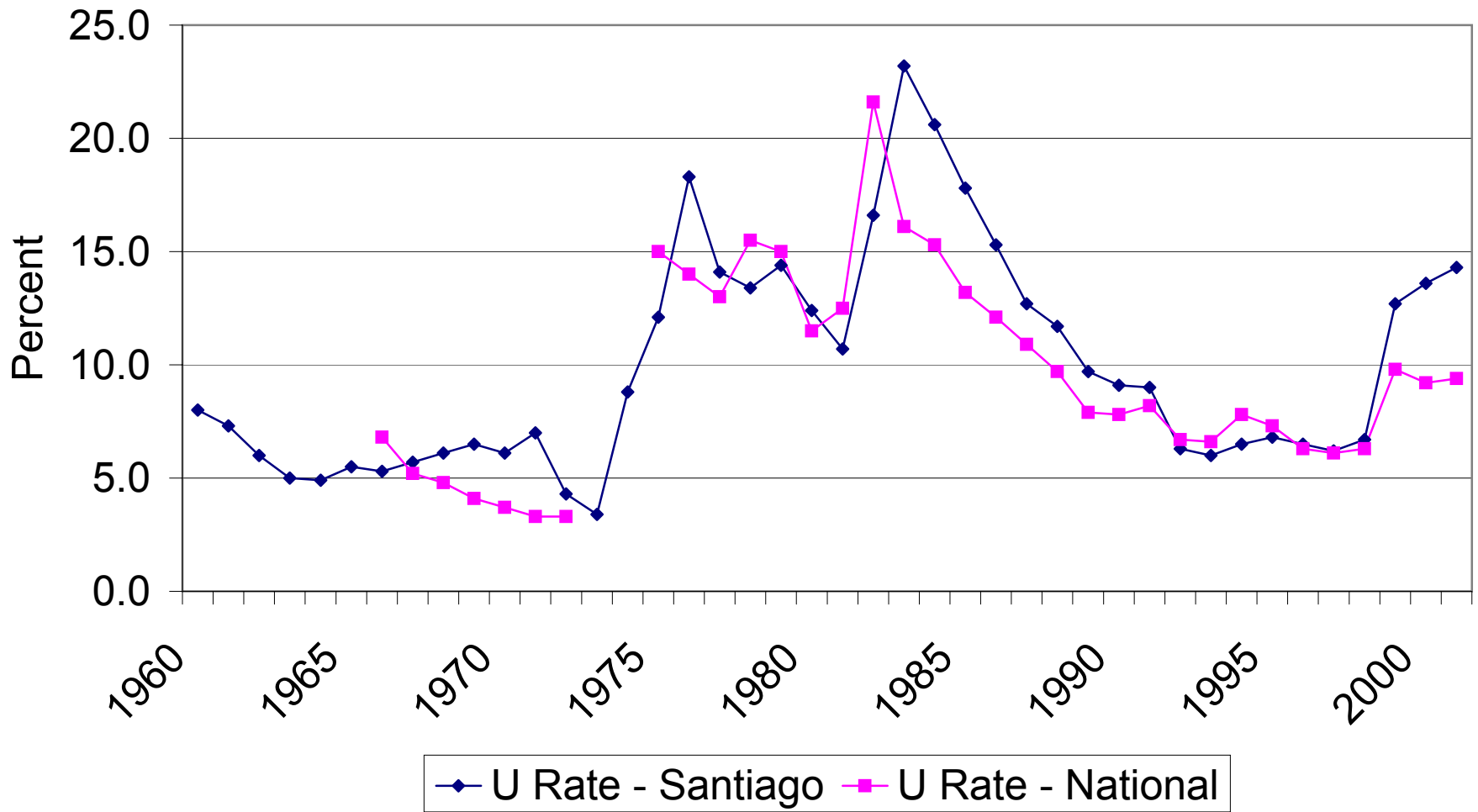


Table III-3. Cost of Unemployment Protection in Chile, 1966 to 2001.

| Year | Labor Force | Unemployment | Unemp. Rate % | Number Un Ben | N Ben/Unemp. | Total Benefits | Monthly Benefits | Monthly Wages | Rep. Rate | G Generosity | B% Benefit Costs |
|--------|-------------|--------------|---------------|---------------|--------------|----------------|------------------|---------------|-----------|--------------|------------------|
| 1966 | 2985 | 204.2 | 6.8 | | | | | | | | |
| 1967 | 2981 | 156.3 | 5.2 | 3.8 | 0.025 | 0.027 | 0.00059 | | | | |
| 1968 | 3003 | 143.1 | 4.8 | 4.1 | 0.028 | 0.038 | 0.00077 | | | | |
| 1969 | 2894 | 119.4 | 4.1 | 4.8 | 0.040 | 0.047 | 0.00082 | | | | |
| 1970 | 2878 | 106.0 | 3.7 | 4.8 | 0.045 | 0.067 | 0.00116 | | | | |
| 1971 | 2950 | 97.9 | 3.3 | | | 0.091 | | | | | |
| 1972 | 2998 | 98.2 | 3.3 | | | 0.087 | | | | | |
| 1973 | | | | 5.1 | | 0.324 | 0.005 | | | | |
| 1974 | | | | 9.4 | | 2.29 | 0.020 | 0.100 | 0.203 | | |
| 1975 | 3137 | 470.2 | 15.0 | 29.3 | 0.062 | 35.1 | 0.100 | 0.455 | 0.219 | 0.014 | 0.205 |
| 1976 | 3139 | 439.5 | 14.0 | 75.5 | 0.172 | 311 | 0.343 | 1.593 | 0.216 | 0.037 | 0.518 |
| 1977 | 3153 | 410.2 | 13.0 | | | 544 | | 4.11 | | | |
| 1978 | 3426 | 532.6 | 15.5 | | | 1062 | | 6.56 | | | |
| 1979 | 3427 | 513.9 | 15.0 | | | 1686 | | 9.69 | | | |
| 1980 | 3583 | 410.8 | 11.5 | 74.3 | 0.181 | 2496 | 2.80 | 14.22 | 0.197 | 0.036 | 0.408 |
| 1981 | 3634 | 452.8 | 12.5 | 74.9 | 0.165 | 3357 | 3.73 | 18.53 | 0.202 | 0.033 | 0.415 |
| a 1982 | 3607 | 779.6 | 21.6 | 130.8 | 0.168 | 6144 | 3.91 | 20.32 | 0.193 | 0.032 | 0.698 |
| 1983 | 3713 | 597.6 | 16.1 | 142.5 | 0.238 | 7086 | 4.14 | 22.47 | 0.184 | 0.044 | 0.708 |
| 1984 | 3834 | 587.5 | 15.3 | 97.8 | 0.166 | 4754 | 4.05 | 26.12 | 0.155 | 0.026 | 0.396 |
| 1985 | 4175 | 552.4 | 13.2 | 97.3 | 0.176 | 5482 | 4.69 | 31.79 | 0.148 | 0.026 | 0.344 |
| a 1986 | 4270 | 517.3 | 12.1 | 84.4 | 0.163 | 4129 | 4.08 | 37.75 | 0.108 | 0.018 | 0.213 |
| 1987 | 4374 | 477.9 | 10.9 | 66.1 | 0.138 | 3056 | 3.86 | 43.99 | 0.088 | 0.012 | 0.132 |
| 1988 | 4569 | 445.3 | 9.7 | 51.8 | 0.116 | 2499 | 4.02 | 52.21 | 0.077 | 0.009 | 0.087 |
| 1989 | 4726 | 373.5 | 7.9 | 39.2 | 0.105 | 1934 | 4.11 | 60.83 | 0.068 | 0.007 | 0.056 |
| 1990 | 4824 | 374.3 | 7.8 | 33.8 | 0.090 | 1758 | 4.33 | 75.90 | 0.057 | 0.005 | 0.040 |
| 1991 | 4919 | 401.2 | 8.2 | 30.2 | 0.075 | 2196 | 6.05 | 94.46 | 0.064 | 0.005 | 0.039 |
| 1992 | 5061 | 337.4 | 6.7 | 23.4 | 0.069 | 2032 | 7.23 | 110.94 | 0.065 | 0.005 | 0.030 |
| 1993 | 5342 | 350.0 | 6.6 | 19.1 | 0.055 | 1884 | 8.20 | 120.29 | 0.068 | 0.004 | 0.024 |
| 1994 | 5463 | 427.0 | 7.8 | 20.6 | 0.048 | 2330 | 9.44 | 144.92 | 0.065 | 0.003 | 0.025 |
| 1995 | 5497 | 401.8 | 7.3 | 21.3 | 0.053 | 2681 | 10.50 | 166.39 | 0.063 | 0.003 | 0.024 |
| a 1996 | 5532 | 349.9 | 6.3 | 21.3 | 0.061 | 2982 | 11.64 | 185.48 | 0.063 | 0.004 | 0.024 |
| 1997 | 5625 | 344.1 | 6.1 | 22.6 | 0.066 | 3192 | 11.78 | 202.56 | 0.058 | 0.004 | 0.023 |
| 1998 | 5738 | 363.6 | 6.3 | 27.3 | 0.075 | 3689 | 11.26 | 217.69 | 0.052 | 0.004 | 0.025 |
| 1999 | 5827 | 571.8 | 9.8 | 49.0 | 0.086 | 6624 | 11.26 | 226.05 | 0.050 | 0.004 | 0.042 |
| 2000 | 5847 | 535.7 | 9.2 | 46.2 | 0.086 | 7225 | 13.02 | 239.33 | 0.054 | 0.005 | 0.043 |
| 2001 | 5861 | 535.0 | 9.1 | 51.3 | 0.096 | 6846 | 11.11 | 251.84 | 0.044 | 0.004 | 0.039 |

Source: INE labor force survey, Superintendencia de Seguridad Social and the International Labor Office. Labor force, unemployment and unemployment insurance beneficiaries in thousands.

Monthly benefits and monthly wages in thousands of pesos. Total benefits in millions of pesos.

a - Break in labor force survey data: 1982 - minimum age raised from 12 to 15. 1986 - annual average.

Earlier data are mainly from the fourth quarter but adjusted for seasonality. 1996 - Survey modified.

G = Index of benefit generosity, derived as the product of the reciprocity rate (N Ben/Unemp.) and the replacement rate. B% = Benefit costs as a percent of payroll.

Table III-4. Key Features of Unemployment Insurance by Time Period in Chile

| | Phase 1 1953-1974 Wage Earners | Phase 1 1937-1974 Salaried Employees | Phase 2 1974-1985 | Phase 3 1985-2002 | Phase 4 Starting 2002 |
|---------------------------------------|---|---|------------------------------|----------------------------------|--------------------------------|
| Base Period Work Requirement (Months) | 36 | 12 | 12 (last two years) | 12 (last two years) | 12 |
| Waiting Period (Days) | 3 | 3 | 0 | 0 | 30 |
| Potential Benefit Duration (Months) | 6 (or less, from individ. account bal.) | 3 (6 in special cases) | 3 (12 in special cases) | 12 | 5 |
| Wages Used to Compute Benefits | | | last 6 months | | last 12 months |
| Statutory Replacement Rate (Percent) | 75 | Flat benefit | 75 (taxable mo. earn.) | Flat benefit | 50 declining to 30 |
| Minimum Benefit (Pct. of Min. Wage) | | 75% Min. Salary in Santiago | 160% Min. Salary in Santiago | 8,669 days 181-360 (1996-2001) | 65,000 (26% avg. mon. salary) |
| Maximum Benefit (Pct. of Min. Wage) | | 200% Min. Salary in Santiago | 360% Min. Salary in Santiago | 17,338 first 90 days (1996-2001) | 125,000 (50% avg. mon. salary) |
| Type of Financing System | Defined Contribution | Pay-Go | Pay-Go | Pay-Go | Defined Contribution |
| Contributions From: | | | | | |
| Employer | 2% Wages | | | | |
| Wage Earner | | | | | 2.4% Wages |
| Salaried Employee | | 1% Wages | | | 0.6% Wages |
| General Revenue | | | Full Cost (most years) | Full Cost | 0.6% Wages |

Source: Various issues of U.S. Social Security Administration (1999).

Table III-5. Comparative Costs of Unemployment Protection in the 1990s.

| Country | N Ben./ Unemp | Rep. Rate | G - Index of Generosity | Unemp. Rate % | Ben Cost Rate - B% |
|--------------------------------|------------------|--------------|----------------------------|------------------|-----------------------|
| Chile | 0.068 | 0.060 | 0.004 | 7.3 | 0.030 |
| Other Latin American Countries | | | | | |
| Argentina (1993-1999) | 0.062 | 0.421 | 0.026 | 14.7 | 0.384 |
| Brazil | 0.296 | 0.510 | 0.151 | 6.6 | 0.996 |
| Uruguay (1990-95, 98, 99) | 0.146 | 0.105 | 0.015 | 9.4 | 0.144 |
| Selected OECD Countries | | | | | |
| Australia | 0.954 | 0.291 | 0.278 | 8.9 | 2.471 |
| Canada | 0.602 | 0.448 | 0.270 | 9.5 | 2.562 |
| France | 0.822 | 0.527 | 0.433 | 11.2 | 4.852 |
| Germany | 0.758 | 0.475 | 0.360 | 10.2 | 3.673 |
| Japan | 0.383 | 0.393 | 0.151 | 3.0 | 0.452 |
| Netherlands (1990 - 1998) | 1.434 | 0.581 | 0.833 | 6.5 | 5.416 |
| Portugal (1990 - 1998) | 0.766 | 0.473 | 0.362 | 5.7 | 2.065 |
| United Kingdom | 0.849 | 0.176 | 0.149 | 7.2 | 1.076 |
| United States | 0.336 | 0.339 | 0.114 | 5.8 | 0.661 |

Source: Estimates developed by the author using information from country sources, the ILO and the OECD. Unless otherwise indicated the data are averages for the ten years 1990-1999. The generosity index (G) is the product of the reciprocity rate (N Ben./Unemp.) and the replacement rate (weekly benefits/ weekly wages). The benefit cost rate (B%) shows benefit costs as a percent of payroll. It is derived as the product of the unemployment rate and the generosity index (Vroman 2002).

Chart 2. Determinants of UI Costs in Chile, 1966 to 2001.

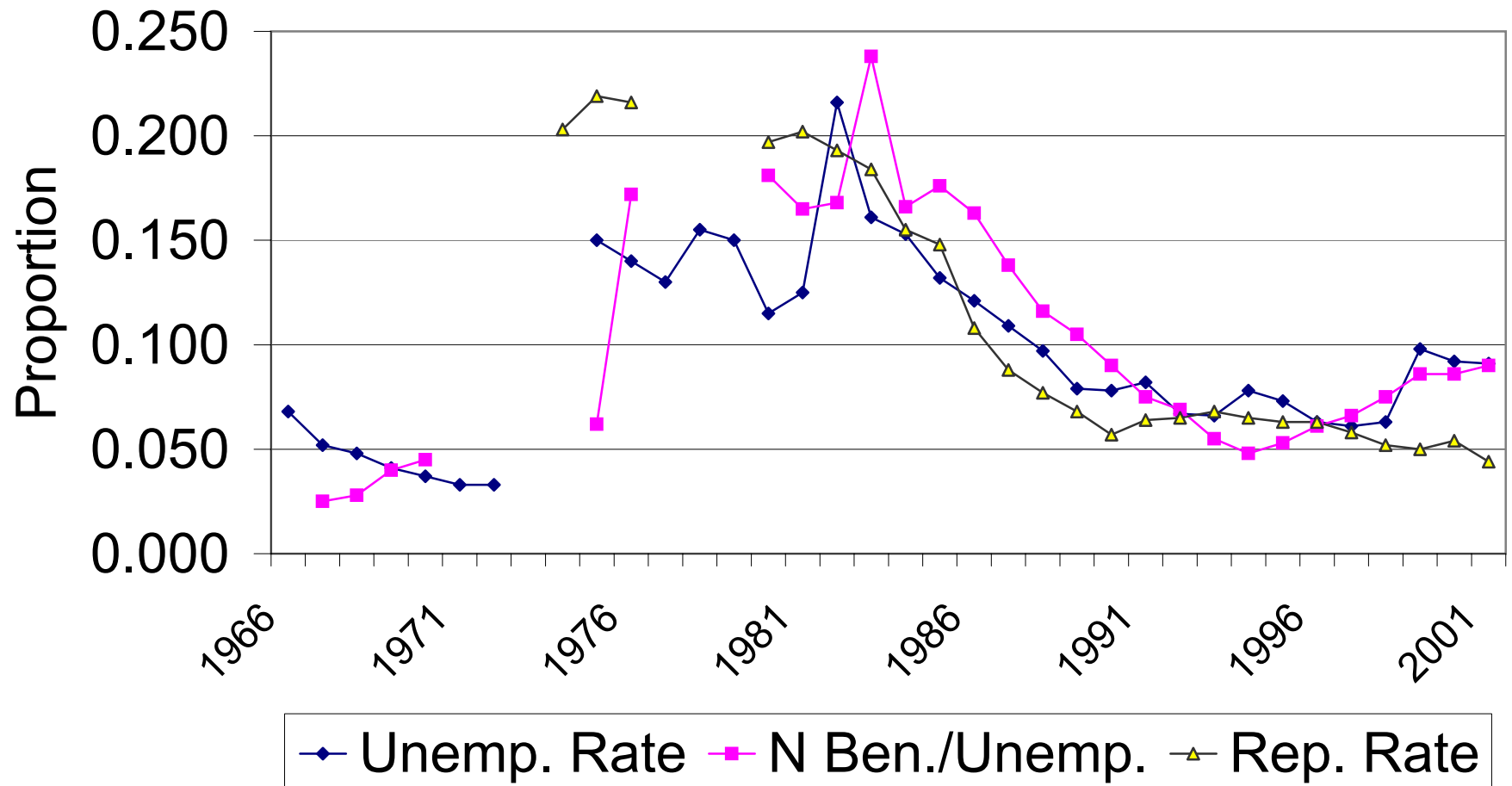


Table A1. Unemployment Rates, 1960 to 2001.

| Year | Chile, Percent | Santiago, Percent |
|------|-------------------|----------------------|
| 1960 | | 8.0 |
| 1961 | | 7.3 |
| 1962 | | 6.0 |
| 1963 | | 5.0 |
| 1964 | | 4.9 |
| 1965 | | 5.5 |
| 1966 | 6.8 | 5.3 |
| 1967 | 5.2 | 5.7 |
| 1968 | 4.8 | 6.1 |
| 1969 | 4.1 | 6.5 |
| 1970 | 3.7 | 6.1 |
| 1971 | 3.3 | 7.0 |
| 1972 | 3.3 | 4.3 |
| 1973 | | 3.4 |
| 1974 | | 8.8 |
| 1975 | 15.0 | 12.1 |
| 1976 | 14.0 | 18.3 |
| 1977 | 13.0 | 14.1 |
| 1978 | 15.5 | 13.4 |
| 1979 | 15.0 | 14.4 |
| 1980 | 11.5 | 12.4 |
| 1981 | 12.5 | 10.7 |
| 1982 | 21.6 | 16.6 |
| 1983 | 16.1 | 23.2 |
| 1984 | 15.3 | 20.6 |
| 1985 | 13.2 | 17.8 |
| 1986 | 12.1 | 15.3 |
| 1987 | 10.9 | 12.7 |
| 1988 | 9.7 | 11.7 |
| 1989 | 7.9 | 9.7 |
| 1990 | 7.8 | 9.1 |
| 1991 | 8.2 | 9.0 |
| 1992 | 6.7 | 6.3 |
| 1993 | 6.6 | 6.0 |
| 1994 | 7.8 | 6.5 |
| 1995 | 7.3 | 6.8 |
| 1996 | 6.3 | 6.5 |
| 1997 | 6.1 | 6.2 |
| 1998 | 6.3 | 6.7 |
| 1999 | 9.8 | 12.7 |
| 2000 | 9.2 | 13.6 |
| 2001 | 9.1 | 14.3 |

Source: INE for national data but adjusted by the author in years prior to 1986. Santiago data from Table 1 in Montenegro (2002).