

## Is Chile a Model for Economic Development?

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# IS CHILE A ROLE MODEL FOR DEVELOPMENT?\*

*Ricardo Ffrench-Davis*\*\*

## *Abstract*

*The Chilean economy is usually highly praised as having been successful since the imposition of neo-liberal reforms under the dictatorship of general Pinochet in 1973. However, the four decades that have elapsed include sub-periods with quite different policy approaches and notably diverse outcomes; thus, there is neither one unique model nor only one outcome. The four decades' growth is moderate, averaging 4.2 per cent per year: it averaged 2.9 per cent (meagre) during the 16 years of dictatorship and a good performance of 5.1 per cent during a quarter-century of democracy, albeit with a vigorous 7.1 per cent in the initial years (1990-98) and a modest 3.9 per cent in the last 15 years. Sometimes, Chile has performed closer to becoming a "model" for development, and at other times the opposite or something in between. Focusing on three episodes (1973-81, 1990-95 and 2008-13), we explore the underlying explanatory variables and some lessons for building "a role model for development".*

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## Introduction

The Chilean economy is usually highly praised by IFIs, diverse political authorities and international analysts. A generalised view prevails that there has been “one” successful Chilean *model* since the imposition of neo-liberal reforms under the dictatorship of general Pinochet in 1973. However, the four decades that have subsequently elapsed include several sub-periods with different policy approaches and external environments, as well as notably diverse economic and social outcomes. Accordingly, there is neither one unique *model* nor only one outcome. Sometimes, Chile has performed closer to become a “model” for development, and at other times the opposite or something in between.

Economic development at least includes the production of goods and services and its distribution among citizens. Accordingly, we will explore how both have evolved along the four decades, given that a role model case should be consistently achieving success in terms of both economic growth and its distribution.

In section I, a summary evaluation is presented of policies and outcomes during the four decades. Section II focuses on three episodes: one corresponds to the first half of the dictatorship, in 1973–81; a second one during the first years of return to democracy, namely 1990–95; and finally the period since the contagion of the global crisis, 2008–13. Section III concludes.

### **I. An Overview Of Four Decades**

In the five governments under democracy (1990–2013), industrial or productive development policies have been largely absent, as they had been under the dictatorship; the Pinochet dictatorship had eliminated most of them in the early years of his regime. On the contrary, macroeconomic and social policies have underwent significant changes; in particular, the macroeconomic regime experienced notable contrasts among and within the periods 1973–81, 1982–89, 1990–98, 1999–2007 and 2008–2013.

The first deep reforms were launched in 1973. This stage of the reforms (1973–81) was characterised by the implementation of a neo-liberal model in its purest and ideological form. Trade and financial liberalisation practically free from prudential regulation, as well as the adoption of “neutral” economic policies --under the view that “always the market knows better”-- were accompanied by massive privatisations. By 1981, success had been generally achieved in reducing inflation and eliminating the fiscal deficit inherited, albeit at the expense of the external balance, a highly appreciated exchange rate and huge external debt, while

recording climbing financial savings yet a low investment ratio. The outcome was a banking and foreign exchange crisis with huge economic and social impacts in 1982, including a GDP drop of 14 per cent, high unemployment exceeding 30 per cent of the labour force and a significant increase in poverty, with a worsening income distribution.

The second stage of the dictatorship (1982–89) implied moves toward more pragmatic policies to overcome the effects of the deep crisis. It involved a series of foreign debt renegotiations, several policy interventions aimed at balancing the external deficit –such as tariff increases and “selective” export incentives– and the government’s direct take-over of the collapsed financial system, before subsequently privatising it again when their balance sheets were in order; heavy public subsidies to banks and debtors represented to the Treasury some 35 per cent of annual GDP. At the end of this period, the economy had recovered, while income distribution had worsened even further than in the 1970s. During recovery, actual GDP grew vigorously, but after due consideration of the 1982 recession it emerges that average annual growth was 3 per cent or under in both halves of the Pinochet regime.

A third variant of the economic model began in 1990, during the return to democracy, when the Chilean economy faced the challenges of achieving a sustained high average GDP growth and serving the great social debt accumulated in the years of dictatorship. The formal slogan of the Concertación Democrática, a centre-left coalition of socialists and Christian democrats, was “change with stability” for achieving growth with equity in the socio-economic dimension of the programme of the new government.

There were significant reforms of the market model, strengthening the social component and correcting severe pro-cyclical failures of economic policies, including labour and tax reforms to improve social expenditure. In addition, substantive counter-cyclical changes in fiscal, monetary, capital markets, exchange rate and regulatory policies were implemented, aiming at a sustainable *real* macroeconomic environment (beyond inflation and fiscal balance under control, seeking an aggregate demand consistent with potential GDP and sustainable external balance and exchange rate).<sup>1</sup>

The new authorities considered these balances of the real economy crucial for development (meant as GDP growth with reduced inequality). One outstanding feature of this period was the regulation of the capital account, with a flexible reserve requirement (*encaje*), which was quite active in these years of large supply of financial flows to the emerging economies. The counter-cyclical active regulation helped to control the volume of inflows, shifting its composition to the long term and their allocation in productive investment; moreover, it provided space for monetary policy and avoided undue exchange rate appreciation

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<sup>1</sup> Details are analysed in Ffrench-Davis (2010, chapter VIII) and Lefort and Lehmann (2003).

and instability. The economy benefited from comprehensive real macroeconomic stability, which is meant to be development-friendly, although there was practically no room for direct industrial or productive development policies nor for direct support to SMEs. The constitution inherited from Pinochet and the strong ideological fashion against selective development policies represented two particular obstacles.

Owing to reformed macroeconomic policies, most of the period's economic activity was close to potential GDP, which had only been the case in 1974, 1981 and 1989 during the dictatorship. It was in this reformed macro-environment that Chile expanded its productive capacity in a sustainable manner between 1990 and 1998, with actual and potential GDP growing in parallel at annual rates averaging 7.1 per cent, while also improving social indicators (table 1).

### *Table 1*

After the mid-1990s, Chile (actually the autonomous Central Bank) gradually moved towards the neo-liberal fashion of capital account and exchange rate liberalisation. The Treasury and the Ministry for the Economy were initially critical of the move, although some years later the Treasury also joined the fashion. Consequently, the exchange rate and domestic demand came to be led by financial flows and fell victim to their volatility. Thus, Chile became vulnerable to the turbulences originated by the Asian crisis in 1998, since it had allowed the exchange rate to appreciate "too much" and external deficit to double in 1996-97 in comparison with 1990-95. This was in acute contrast with the situation when Chile was immune to the Mexican financial crisis in 1995.

Vulnerability was aggravated with the full liberalisation of the exchange rate (in 1999) and the capital account (in 2001). Subsequently, the economy exhibited a stagnating actual output and a drop in the growth of potential GDP during 1999-2003, when unemployment and richer/poorer quintiles ratio rose (back to 16 times). After a partial recovery in 2004-08, led by a sharp improvement in the terms of trade, it suffered the arrival of the contagion of the global crisis in late 2008 and 2009. Export volumes and prices fell and capital inflows were reversed. Thanks to a sharply improved domestic macroeconomic management, with strong counter-cyclical fiscal policy and a progressive bias (subsidies to youth employment and the unemployed), as well as the fortunate help of a rapid recovery of export prices, there was a solid revival of economic activity by late 2009.

Recovery was undeterred by a great earthquake in 2010; furthermore, it was strengthened by public expenditure in reconstruction, thus pushing actual GDP near its potential output by 2012. The average increase in GDP was 3.9 per cent between its peaks in 1998 and

2007 and that in 2013.<sup>2</sup> While this figure was greater than the 2.9 per cent of the dictatorship, it remained far weaker than the 7.1 per cent recorded during the first nine years of democratic regimes.

The fluctuating growth dynamism implies a variable development gap with the developed economies. Indeed, table 2 shows that the gap with developed countries increased during the dictatorship. On the contrary, the rather good average performance in the two and half decades of democracy implied that Chile had reduced the distance with the developed world and left behind most of Latin America, as depicted in table 2. Nevertheless, this performance was not continuous. As shown in table 1, only the first short half of the period (1990–98) involved a vigorous GDP per capita growth (tripling the speed of the USA), with a strong *development convergence* with the developed countries (the per capita income gap fell by one percentage point per year), including a significant reduction in income inequality with improvements in income distribution (to a richer/poorer quintiles ratio of 13.7). This shortening distance continued in the long second half (1999–2013), although per capita GDP growth trend halved and the strong development convergence exhibited in 1990–98 was weakened (to only one half percentage point), as well as previous improvements in income distribution and the intensity of poverty reduction.

*Table 2*

## **II. Three Quite Diverse Experiences**

### **A. *The neo-liberal revolution, 1973–81***

Launched after the military coup of 11<sup>th</sup> September 1973, the first stage of the economic reforms (1973–81) represented an extreme case due to the amplitude of the role granted to the market, the intensive privatisation of the means of production, sharp liberalisation of imports and the domestic financial markets, as well as the regressive changes imposed on social organisations. There was a determinant emphasis on the “neutrality” of economic policies, disregarding the high existing inequality, under the belief that the “market always knows better” and provides equitable outcomes.

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<sup>2</sup> The measurement of economic growth should be made between comparable macroeconomic situations. We compare years with a high level of capacity use, namely those with actual GDP close to potential GDP. Significant recoveries of economic activity such as in 2004-08 and 2010-12 came after recessions that cannot be ignored. On the contrary, the vigorous growth from 1990-98 followed an overheating economy in 1989.

The initial concerns of Pinochet's government lay with controlling the acute macroeconomic disequilibria inherited, particularly a 700 per cent hyper-inflation recorded in 1973, with the reduction of a huge fiscal deficit assuming top priority.

In 1973-74, the government benefited from a very high copper price (by far the main export, by a public firm –CODELCO), which increased public revenue and the availability of foreign currency. While it was evident to independent observers that the price was unsustainably high, the revenue from copper exports was fully spent by the government *paripassu* with its collection. Economic activity significantly recovered in 1974, making use of installed capacity underutilised during the previous year. However, the price of copper sharply declined in late 1974, prompting the government to introduce a tougher adjustment programme in 1975, led by fiscal and monetary contraction and significant exchange rate devaluation.

The acute monetary restrictions had a great impact on economic activity: during 1975, industrial output fell by 28 per cent, GDP declined by 17 per cent and total unemployment peaked at 20 per cent of the labour force. Since productive capacity was not destroyed but heavily underutilised – reflecting a main real macroeconomic disequilibria– a significant output gap between actual GDP and potential GDP emerged, whereby an estimated 21 per cent of GDP was underutilised in 1975 (figure 1).

### *Figure 1*

In 1975, the domestic capital market was fully liberalised under weak regulations (the “market knows”), import policy was moving toward free trade and taxes on profits had been drastically reduced, as well as public investment and real wages. Shortly after, the fiscal budget shifted to a surplus.

In the meantime, international capital markets had become highly liquid, seeking newer destinations for their supply, including several Latin American nations. By 1977, Chile had started to receive huge capital inflows, mostly bank loans. Indeed, given that the public budget was then in surplus, they reached the private sector. A passive or neutral public policy allowed inflows, which appreciated the exchange rate and increased domestic demand.<sup>3</sup> Naturally, the deepening exchange rate appreciation significantly contributed to the drastic decline in inflation by the early 1980s.

However, in parallel, trade liberalisation plus exchange rate appreciation encouraged

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<sup>3</sup> In 1979, Chile moved to the then known as “monetary approach to the balance of payments”, which involved fixing the nominal exchange rate and determining that the money supply would only be increased (reduced) in response to purchases (sales) of dollars by the Central Bank. It is similar to the “currency board” adopted by Argentina in 1991 and that exploited in a dramatic crisis in 2002.

imports, which increased faster than exports, in a trend that continued for almost five years. Unavoidably, foreign debt of the private sector was accumulating rapidly.

In parallel, actual GDP was fast increasing, even though output capacity was rising quite slowly. In fact, the difference was made by the reutilisation of the large output gap --of 21% between actual and potential GDP-- generated in the sharp recession of 1975. Investment in new capacity was low, with the gross investment ratio averaging 16 per cent of GDP in 1974–81, much lower than the 20 per cent recorded in the 1960s. Foreign loans were overwhelmingly used in imports of consumer goods, with limited imports of equipment and machinery. In the process, debt amortisation and interest payments rose quickly and the deficit on current account was climbing, reaching an unsustainable 21 per cent of GDP in 1981.<sup>4</sup>

Why did the investment ratio averaged merely 16 per cent of GDP? First, after the large output gap generated in 1975, actual GDP became again close to potential GDP only in 1981. Thus, the macroeconomic environment involved high rates of underutilisation of productive capacity for several years. This persistent output or recessive gap was a main factor discouraging gross capital formation (Agosin, 1998; French-Davis, 2006; Solimano, 1990). Naturally, when entrepreneurs are not using a significant part of their capacity, profits are lower and thus entrepreneurs have less liquid funds, all of which evidently discourages expanding their capacity. As a typical feature of financial crises, abrupt recessions being followed by gradual recoveries clearly have a significant negative incidence on productive investment, thus pressing downward the trend of GDP growth and the quality of employment.

Second, the financial reform (mostly implemented in 1975) gave way to a predominantly short-termist market with very high real interest rates charged on domestic loans. In fact, the most common loan held a 30-day term, while the activities of public investment banks were curtailed and annual real lending interest rates of the banking system averaged 38 per cent (reflecting a quite “outlier” macro-price) in 1975–82.

Third, trade liberalisation-cum-exchange rate appreciation reduced the cost of imports, principally of consumer goods, with their domestic output being crowded-out. Liberalisation attracted investors in the production of exports with a much weaker force than the discouragement of domestic firms competing with imports, with a counter-expected drop in the share of tradables in GDP.<sup>5</sup> Additionally, large shares of bank lending were used by economic groups to purchase public firms being privatised (fewer in creating new activities), as well as by

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<sup>4</sup> Pro-cyclical monetary and exchange rate domestic policies were aggravated by a huge jump in interest rates in the USA in late 1979 and a US dollar appreciation in 1981, which additionally raised the cost of the outstanding foreign debt.

<sup>5</sup> Based on the national accounts, the share of “tradables” was estimated to have fallen about 5 percentage points of GDP, instead of increasing as expected with trade liberalisation.



households purchasing imported consumer goods. Finally, financing productive investment through increased inflows was notably scarce. It is crucial who intermediates capital inflows, and those intermediated by foreign direct investors (FDI) represented a minority.

By 1981, success had been achieved in eliminating inflation, exhibiting a large fiscal surplus (implying that the external deficit was completely from the private sector) and a high actual GDP growth between the depressed 1975 and 1981. There was euphoria among the government, IFIs and large business firms, holding the view that Chile was experiencing “an economic miracle”.<sup>6</sup> However, domestic vulnerability to the changing moods of financial markets had been created. Foreign borrowing had given rise to a domestic lending boom in an atmosphere of lax prudential regulation and supervision. Related-party auto lending rose rapidly, often with fictitious guarantees. The banks renewed loans (often on a 30-day term) and financed interest payments with new loans. Non-performing loans appeared low and the banks’ profits high. Many loans were backed by stock and real estate, whose prices were inflated owing to the financial boom, as well as the mistaken belief that the Chilean economy would continue to grow at around 8 per cent a year (the actual trend of potential GDP was closer to 3 per cent).

Underlying these disequilibria, there was a severely mistaken diagnosis, led by the belief in market spontaneous self-regulating adjustments. Since it had achieved a fiscal surplus and external borrowing was being decided by private debtors and lenders, the government assumed that a foreign exchange crisis would never occur. Indeed, the government was reassured in this false assumption by the explicit and strong support of the International Monetary Fund (Robishek, 1981), ignoring that an unsustainable deficit could be generated in the private sector (Marfán, 2005).

In 1981, bank debt per capita almost doubled the Latin America average. The current account deficit had risen to 21 per cent of GDP, with domestic savings having collapsed. Chile required growing net financial inflows quarter after quarter, which becomes increasingly difficult when the debt stock has been rising so much faster than income. It is evident that the probability of flows reversal sharply rises with an increase in the debt stock, size of amortisations and deficit on current account, as well as the consequent need for exchange rate devaluation.

The macro-adjustment started to take place in the first semester of 1982, well before the explosion in Mexico of the Latin American debt crisis in August of that year. It is highly relevant that inflows remained quite large during 1982 (about 10 per cent of GDP), but much less than the net inflows in 1981, to which the economy had become used. Actually, the

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<sup>6</sup> In his interesting evaluation of the experiment, Foxley (1983) presents several revealing citations, including one from an editorial of the *Wall Street Journal*: USA should borrow the economic team of Chile (01/18/80), referring to the incoming Reagan presidency.

economic authority felt obliged to devalue by June. The economy intensified the deep recession already at work, with a 14 per cent GDP drop in 1982, open unemployment was affecting one in every three workers in 1983, there were countless bankruptcies including most part of the private banks and a huge increase in poverty and income inequality was evident. In 1982, the Chilean economy --already with null inflation, fiscal surplus, intensive privatisations and free imports-- experienced the deepest and more regressive adjustment in all of Latin America.

The combined changes to the production structure, the repression of labour rights and the financial reforms, combined with real macroeconomic instability, caused severe distributive setbacks. The ratio between the household per capita income of the richest and poorest quintiles increased from 13 in the 1960s to 16 in 1976–81, and to 20 during the 1980s (French-Davis, 2014), while the Gini index increased by 4 percentage points first and 5 more points in the 1980s.

In summary, prior to the debt explosion, the neo-liberal experiment had produced a society with increased inequality on many fronts in 1974–81, a predominance of *financierism* over *productivism* (namely at the expense of increases in productivity of labour and capital, as well as of productive entrepreneurship), a highly pro-cyclical macro-policy regime, as well as a meagre and regressive average economic growth. The 1982 crisis further worsened this mediocre outcome, which was so unfriendly with development. Only by 1988 was Chile able to recover the GDP per capita achieved in 1981.

### ***B. Counter-cyclical regulation of the capital account: 1990–95***

After the great debt crisis, Latin America regained access to private capital inflows by the early 1990s.<sup>7</sup> Chile was one of the first to attract new funds and was among the countries facing the greatest supply of inflows in relation to its economic size.

With the return to democracy in 1990, the Chilean economy faced the challenges of achieving a sustained high average growth and serving the vast social debt accumulated during the dictatorship. There were significant reforms of the market model, including labour reforms (which restored several labour rights), a tax reform reintroducing taxes on profits eliminated by the dictatorship (which raised public revenue geared to improve social expenditure and the distributive effects of the tax system), and a substantive counter-cyclical reform in

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<sup>7</sup> See, for instance, the classical paper by Calvo, Leiderman and Reinhart (1993).

macroeconomic policies.<sup>8</sup>

In fact, the shadow of the great recession of 1982, including its negative impact on growth and equity, was quite present in the minds of the new authorities. Consequently, the top priorities for implementing macroeconomic policies were achieving sustained equilibrium in financial markets and the real economy, diminishing vulnerability to external shocks and improving employment. The macroeconomic reforms were implemented in the capital account, exchange rate, monetary and regulation policies, under the view that the equilibrium of the “real” economy was crucial for growth with equity; in parallel, care was taken of fiscal responsibility.

Chilean public policy in the first half of the 1990s represented a significant step towards a counter-cyclical approach to macroeconomic management. In brief, policymakers responded to the massive availability of foreign capital by implementing counter-cyclical policies to moderate short-term and liquid inflows, while keeping the door open to long-term flows. In a tightly coordinated action by the Ministry of Finance and the Autonomous Central Bank, the authorities made use of a wide range of measures to regulate the surge in the offer of financial inflows in 1990–95. As a crucial piece, this included an unremunerated reserve requirement (called *encaje*) established to raise the cost of bringing in short-term capital, which is a market-based instrument that affects relative costs. The rate of the *encaje*, its coverage and the term for which it was retained in the Central Bank were periodically adjusted according to the intensity of the supply of funds from abroad and the evolution of international interest rates (Ffrench-Davis, 2010, chap. VIII). Up to 1995, the authorities systematically monitored avoidances that might be appearing in the effectiveness of the *encaje*.

The authorities also used exchange rate intervention to hold down its real appreciation to a level consistent with the external balance, as well as monetary sterilisation to keep domestic demand consistent with potential GDP. These and other counter-cyclical policies supported a development strategy that encouraged export growth and its diversification, as well as productive investment and employment.

Three other policies contributed to the success in managing capital inflows. First, there was a responsible fiscal policy, whereby permanent increases in social spending were financed with permanent new taxes. Consequently, Chile had a significant non-financial public sector surplus in 1990-97, averaging 1.8 per cent of GDP, which was used to reduce the large external

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<sup>8</sup> The reforms approved by the Parliament (including the tax reform) were always less comprehensive than those originally proposed by the government. A determining factor was the group of senators appointed under the Constitution designed by the dictator Pinochet in 1980, which more than compensated for the majority achieved by candidates of the new democratic government in 1989 and 1993 parliamentary elections.

liabilities generated during the 1980s crisis. The prudential fiscal approach included observing the regulations of a stabilisation fund for public copper revenues, which contributed to stabilising public expenditure and preventing excessive exchange rate appreciation. Of course, running a fiscal surplus does not guarantee financial stability; recall that the great 1982 crisis occurred despite Chile having had large fiscal surpluses.

Second, prudential banking regulations had been introduced in 1986 in response to the banking crisis of 1982–83. The democratic authorities effectively resisted pressures to weaken supervision when lobbying sectors argued that the system was sufficiently mature to self-regulate. This deterred capital inflows to trigger another domestic credit boom.

Third, authorities continually monitored aggregate demand and its consistency with productive capacity. Consequently, macroeconomic disequilibria were not allowed to accumulate. Some overheating occurred in 1991 and 1993, although the authorities conducted a downward adjustment in aggregate demand in due time. Chile was able to make active monetary policy with a significant interest rate differential with the US rate when needed for domestic equilibria, thanks to the policy space provided by the *encaje*.

The set of policies was highly successful, in the sense that during 1990–95 --and especially when the contagion of the tequila crisis spread in 1995-- the current account deficit was moderate (2.3 per cent of GDP in 1990–95), its financing mostly involved long-term inflows, international reserves were enlarged, the total short-term external liabilities were held to a fairly low magnitude,<sup>9</sup> aggregate demand was consistent with potential GDP and the real exchange rate was kept at a sustainable level, as shown by the moderate deficit on current account financed by greenfield FDI. All these are conditions of comprehensive real macroeconomic balances. They would not have been feasible without regulating capital inflows, managed flexibility of the exchange rate (see Williamson, 2003) and pursuing an active monetary policy.<sup>10</sup> Strategic features of the policies used were in frontal contrast with the mainstream fashion of full capital account liberalisation and fully free or fully pegged exchange rate policy.

When the Mexican exchange rate crisis exploded in 1995, the Chilean economy proved immune to contagion with a vigorous growth in that year. In 1990–95, average GDP growth peaked at 7.9 per cent, with some improvement in income distribution (see table 1, above) and a sharp drop in poverty. The producers of GDP --labour and capital, the real economy-- benefited from comprehensive real macroeconomic stability.

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<sup>9</sup> In French-Davis (2010 and 2014), an analysis is made of empirical literature critical and supportive of the working of the *encaje*.

<sup>10</sup> Good luck also played a role, with a sharp improvement in the terms of trade in 1995, although it still remained 20 per cent below the average in the last biennium of the dictatorship.

One main merit of the policies during 1990–95 is that Chile successfully resisted pressures of the fashion in US academia and IFIs, as well as the temptation to achieve a faster disinflation with an increased domestic absorption of capital inflows and at the expense of exchange rate appreciation and a larger external deficit. High productive investment was the main factor behind the outstanding sustained GDP growth. As empirical studies robustly show, given the irreversibility of private investment it responds positively to real macroeconomic equilibria, whenever they appear to be sustainable (Agosin, 1998). For real sustainability, it must fulfil two key conditions: first, effective demand has to be consistent with the productive capacity being generated; and, second, key macro-prices (particularly the exchange rate) must be consistent with a sustainable external balance (Ffrench-Davis, 2006). In the six-year period from 1990 to 1995, actual and potential GDP rose at similar rates, with the economy working close to the production frontier; namely, with a minor output gap and a sustainable external balance. Indeed, these are crucial ingredients of real macroeconomic balances.

However, macroeconomic policies lost their strength after 1995. Paradoxically, the autonomous Central Bank gradually moved towards the neo-liberal fashion of capital account and exchange rate liberalisation. In 1996–98, Chile did partially bend towards the powerful international fashion of promoting capital account liberalisation, allowing a real appreciation of the peso and imbalances such as in the external accounts and a domestic aggregate demand growingly intensive in imported components. This fashion was generally in command in emerging economies, pressed by the US government, the IMF and World Bank, the OECD and generally in the Anglo-Saxon academic world. It had been reinforced under the belief that the management of the tequila crisis had shown that the world had learnt to control financial crisis; indeed, such over-optimism was also absorbed domestically by business leaders and some public authorities. The weakening of the counter-cyclical approach took the form of principally allowing leakages to the *encaje* and stepping-back in the managed flexibility of the exchange rate.

Therefore, when the Asian crisis contagion reached Chile in 1998, the economy had accumulated rather significant imbalances, whereby the real exchange rate appreciated by 16 per cent between 1995 and 1997 and the current account deficit jumped to 4.8 per cent of GDP in 1996–97, versus 2.3 per cent in 1990–95, which further worsened with a sharp negative terms of trade shock in 1998. Fiscal responsibility had been kept, with an actual surplus averaging 2.1 per cent of GDP, while a larger private deficit was financed by the rise in their external liabilities, encouraged by a weaker regulation of the capital account and exchange rate appreciation.

In 1996–97, Chile continued to record vigorous growth, with both output and investment remaining high. A determinant factor behind the record investment ratio was the

high employment of productive capacity as shown. However, as previously mentioned, the macro economy was becoming vulnerable to changes in the international environment, with the appreciation of the exchange rate and rise of external deficit. Fortunately, as said, Chile did step back in 1996–98, albeit only to a middle-of-the-road position. While it did not dismantle regulations, it allowed a gradual weakening of their effects (Le Fort and Lehmann, 2003); accordingly, disequilibria were moderate after six years of counter-cyclical and only a couple of years of soft pro-cyclical.

Therefore, Chile had advanced towards development with the significant macroeconomic reform in 1990–95, with some steps back in 1996–97, while it only had made minor progress with respect to productive development policies. Later, it gave up liberalising the exchange rate in 1999 and the capital account in 2001. Table 3 compares the average performance of GDP and wages in 1990–98 and 1999–2013, marking a large contrast. Capital formation is rather similar and suggests a sharp drop in total factor productivity, partly associated with real macroeconomic instability.

### ***C. Contagion, counter-cyclical response and imbalanced recovery in 2008–13***

When the contagion of the global crisis arrived in 2008, economic activity in Chile suffered a sharp recessive adjustment between late 2008 and 2009, including a contraction of capital flows, trade volume and copper price. In contrast with a mostly neutral approach since the late 1990s, the government adopted a strong counter-cyclical approach, making use of the sovereign fund that had been accumulated during the boom in copper prices in accordance with the structural fiscal balance approach adopted in 2001.

Expenditure was increased by 17 per cent and some tax rates were reduced transitorily (on fuels, loans, SMEs), despite fiscal income having fallen 10 per cent in 2008 and 20 per cent in 2009.<sup>11</sup> This implied a transitory actual deficit of 4.4 per cent of GDP in 2009. The Central Bank sharply reduced the monetary policy interest rate, albeit in a delayed decision. Thus, the strong counter-cyclical fiscal policy was the main force compensating for the negative external shocks. The domestic economy (GDP non-exported) already exhibited a significant recovery push by the last quarter of 2009, outlining the effectiveness of the counter-cyclical fiscal policy.

The counter-cyclical behaviour of the Treasury had to coexist with huge pro-cyclical outflows of funds from residents, principally the private social security firms, which transferred

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<sup>11</sup>Ffrench-Davis (2014, ch. IX, table IX.2). This chapter discusses policies between the contagion of the Asian crisis and the start of the global crisis.

abroad the equivalent of 10 per cent of GDP in 2009.<sup>12</sup> The liberalisation of residents' capital flows hampered macroeconomic management for their pro-cyclicality joined that of the financial flows of non-residents. The liberalisation of the capital account continued to be costly for development.

By the last quarter of 2009, the economic recovery was well advanced, although it was momentarily stopped by a severe earthquake on 27<sup>th</sup> February 2010 (27F), only a few days before the end of President Bachelet's government and the beginning of that of President Piñera. In a few weeks, the recovery restarted. The high level of domestic demand, a consequence of the counter-cyclical policy of 2009, was further increased by reconstruction costs following the 27F earthquake. Given that installed capacity was significantly underutilised --despite the destruction caused by the earthquake and the subsequent *tsunami*<sup>13</sup>-- the accelerated public expenditure was consistent with a move toward macroeconomic equilibrium (using capacity) as long as a recessionary gap prevailed.

Indeed, in 2010, reconstruction spending strongly contributed to reactivating domestic demand and thus actual GDP, without inflationary pressures. Of course, the recessive gap was being reduced during the adjustment period, increasing employment and stimulating capital formation, although there was no structural progress in the generation of GDP, manufacturing remained depressed and export diversification stagnated. It was rather the recovery effect. With which, employment and income distribution improved, albeit returning to the social achievements already conquered by the mid-1990s.

Actual GDP was increasing strongly until 2012, with an average 5.7 per cent annual rate over the three-year period. To avoid the repeated error of confusing sustainable growth with recovery of economic activity, it is necessary to measure performance from peak to peak. If growth is measured from the previous peak of 2007, actual GDP growth averaged 3.9 per cent, which is consistent with the fact that actual GDP only rose 4.1 per cent in 2013. The economy had reached full capacity and the 4.1 per cent reflected the fact that potential GDP growth was closer to that figure than to 5.7 per cent. It is similar to the 3.9 per cent growth of the previous nine year period (1999–2007), but much lower than the 7.1 per cent recorded in 1990-98.

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<sup>12</sup> French-Davis (2014, ch. X, table X.1), based on Central Bank figures. This chapter details the policy answer to the contagion in 2008-09, recovery in 2010-12, and building of dependency on a very high price of copper.

<sup>13</sup> The Central Bank estimated that potential GDP had been reduced by 1 to 1.5 per cent by the earthquake and tsunami. Thus, to be accurate, adjustment must be made for the 27F destruction of capacity by adding those 1-1.5 percentage points for the loss of potential GDP, thus arriving at an annual average for growth of close to 4.1 per cent in the six-year period 2008-13. An additional adjustment could be made if it is assumed that the contribution of export volume to GDP growth would increase if world trade was normalised.

Moreover, average real wages and minimum wages had risen much slower during the two subperiods that followed since 1999 (see table 3).

### ***Table 3***

Slow economic growth and social indicators returning to achievements conquered almost two decades ago do not provide a “model” of development. However, there is more. The transition from the recessionary gap to close to full employment and use of potential GDP undoubtedly reflects one essential macroeconomic balance. Nonetheless, macroeconomic equilibrium includes important dimensions other than inflation under control, including external and comprehensive fiscal balances. Therefore, to achieve sustainability, fiscal and external accounts must also converge to a sustainable balance when the recessive gap disappears.

Very early in the transition of actual GDP toward potential GDP, there was a significant exchange rate appreciation and new permanent public expenditures without the corresponding permanent fiscal income. As a result, when the recessionary gap disappeared in 2012 and early 2013, two macroeconomic disequilibria had emerged: (i) an outlier overvalued exchange rate; and (ii) a public budget supported by a transitory high copper price. For several years, imports and fiscal expenditure were growing much faster than the quantum of exports and tax proceeds.

During 2009, the external sector regained a surplus due to jumps in the copper price. Meanwhile, after having experienced a strong revaluation up to \$435 pesos to the dollar in March 2008, the exchange rate underwent a sharp devaluation, reaching \$650 by late 2008, before it responded to the subsequent dominant expectation that Chile was emerging from the crisis. Consequently, there was a new trend toward appreciation, with the exchange rate having appreciated to \$460 by mid-2011.

These intense fluctuations are in sharp contrast with the view that the exchange rate is a determinant variable for the allocation of resources for exporters and those competing with imports. Evidently, derivatives markets do not solve the obstacle that instability brings for decision-makers of irreversible investment; rather, this instability is quite detrimental to development.

Table 4 presents disaggregated data for the recent cycle 2008-13. It shows that imports grew notably faster than GDP and exports for several years, with the gap financed by a high price of copper. Notwithstanding that high price --most probably a transitorily high one<sup>14</sup>-- the

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<sup>14</sup> Actually, in the first half of 2015, the nominal price of copper averaged nearly 30% less than in 2010-12.



current account was exhibiting a deficit equivalent to 3.4 per cent of GDP in 2012-13. Additionally, a previous trend towards some exports diversification had been stagnating (a sort of *Dutch disease* was at work).

#### *Table 4*

The fiscal disequilibria are also depicted in table 4. In this six-year period, GDP increased by 26 per cent, while fiscal expenditure rose 53 per cent, without any significant tax reform. The difference was covered by fiscal income from copper exports.<sup>15</sup> In fact, there is a dangerous dependence of public expenditure and private imports on a high copper price.<sup>16</sup> Several permanent increases in public expenditure --such as continued implementation of the social security reform of 2008, increase in postnatal benefits and elimination of a 7 per cent tax on some pensions-- have been financed to a minor degree by a tax adjustment that raised the rate on profits but reduced the progressive income tax. Financing has mostly come from the transitory tax proceeds generated by copper. For instance, in 2012, the Treasury spent the equivalent of fiscal revenue from copper corresponding to a US\$3.30 price per pound, compared with less than a current price of US\$1.00 in 2004-07.

Obviously, permanent expenditure already at work and other required to finance new public goods and inclusive productive development demand a substantive tax reform that collects in a progressive way.

In brief, the inflation rate had been notably moderate. In contrast, there have not been sustainable balances between (quantum) export supply and import demand, nor between permanent public expenditures and structural tax income, as well as between the evolution of aggregate demand and potential GDP. The real economy has responded with a modest 3.9 per cent average GDP growth, quite lower than the 7.1 per cent recorded in 1990-98.

### **III. Closing Remarks**

One distinctive feature of neo-liberalism is its neglect of the implications of initial inequality and sectoral imbalances; of the heterogeneity in productive structures, among diverse economic agents, and in access to voice and power of different sectors; of the social and allocative

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<sup>15</sup> Real tax income from copper depends on both its real price and the costs of production, which have been increasing quite fast in real terms. Note that as the Chilean tax system is highly dependent on the VAT, tax revenue grows faster than GDP as the external deficit increases as happened in 2010-13. See Table 4.

<sup>16</sup> Based on the significant revenue from copper mining, the opponents of tax reform have claimed that there are "sufficient fiscal resources." They do so without examining the need to revise downwards sustainable revenue, with a "reasonable" trend estimate of copper prices.

implications of market segmentations; and of the difficulty of transparently transmitting information to diverse economic agents so that they can face comparable opportunities.

Ultimately, neo-liberalism underestimates the frequent presence of destabilising adjustment processes, lags and overshooting, as well as the incompleteness of markets and institutions in developing nations. These elements represent severe obstacles that prevent “neutral” and indirect global economic policies from being effective.

Excepting the first years of return to democracy in 1990, an output gap prevailed for most of the time. The Chilean economy has been out of real macroeconomic equilibria, with significant output gaps, with only in 1991–97, 2007 and 2012–13 operating close to potential GDP. Furthermore, a quite unstable outlier exchange rate has worsened trade performance.

The specific policies and approaches used in each of the three episodes were quite diverse, evolving from the extreme naiveté of the 1970s into the pragmatic approach of the early 1990s. The end of the century saw a move away from macroeconomic sustainability as authorities gave in to the temptation to move toward financial globalisation disregarding the severe underlying risks.

For both growth and equity, it is necessary to reach sustainable real macroeconomic balances. Beyond low inflation and fiscal responsibility, an exchange rate management functional for productive development and an active management of aggregate demand in levels consistent with productive capacity are also required. The recent performance has been deficient on both of these matters. In returning to macroeconomic policies for development, the regulation of speculative capital flows merits top billing among the list of actions for inclusive development.

Nonetheless, real macroeconomics is not enough. The 1990s experience was notably successful in growth with stability, although productive structures improved too mildly, as well as income distribution. It implied progress toward development, albeit in an incomplete manner. For long-term sustainability, the economic agenda requires further deep reforms to “complete” long-term innovative financing for development (with pro-SMEs and pro-employment biases), labour training and technological innovation, among others.

The strong expressions of domestic discontent, present in recent years, can be interpreted as a reinforced message of the urgent need to design and implement coherent strategies and make major inclusive reforms to productive structures and public social and economic policies. The great challenge is to move towards comprehensive development with an increasingly inclusive and more equitable productive system.

## References

- Agosin MR (1998). Capital inflows and investment performance: Chile in the 1990s. In: Ffrench-Davis R and Reisen H, eds., *Capital Flows and Investment Performance: Lessons from Latin America*, Paris, OECD Development Centre/ECLAC.
- Banco Central. *Informe de Política Monetaria*, IPOM, several issues.
- Calvo G, Leiderman E and Reinhart C (1993). Capital inflows and real exchange rate appreciation in Latin America: The role of external factors. *IMF Staff Papers*, 40(1).
- Edwards S and Cox-Edwards A (1991). *Monetarism and Liberalisation: The Chilean Experiment*, Cambridge, Ballinger.
- Ffrench-Davis R (2014). *Chile entre el neoliberalismo y el crecimiento con equidad: 40 años de políticas económicas y sus lecciones (Quinta edición)*, Santiago, JCSáez Editor.
- Ffrench-Davis R (2010). *Economic Reforms in Chile: From Dictatorship to Democracy (Second Edition)*, London and New York, PalgraveMacmillan.
- Ffrench-Davis R (2006). *Reforms for Latin America's Economies: After Market Fundamentalism*, London and New York, PalgraveMacmillan.
- Ffrench-Davis R and Tapia H (2001). Three varieties of capital surge management in Chile. In: Ffrench-Davis R, ed., *Financial Crises in Successful Emerging Economies*, Washington, DC, Brookings Institution.
- Foxley A (1983). *Latin American Experiments in Neoconservative Economics*, Berkeley, University of California Press.
- Larraín F and Vergara R (2000). *La transformación económica de Chile*, Santiago, Centro de Estudios Públicos.
- Le Fort G and Lehmann S (2003). El encaje y la entrada neta de capitales: Chile en el decenio de 1990. *CEPAL Review*, 81.
- Marfán M (2005). La eficacia de la política fiscal y los déficit privados: un enfoque Macroeconómico. In: Ocampo JA, ed., *Más allá de las reformas: dinámica estructural y vulnerabilidad macroeconómica*, Bogotá, CEPAL/Alfaomega.
- Robichek W (1981). Some reflections about external public debt management. *Alternativas de políticas financieras en economías pequeñas y abiertas al exterior, Estudios Monetarios VII*, Santiago, Banco Central de Chile.

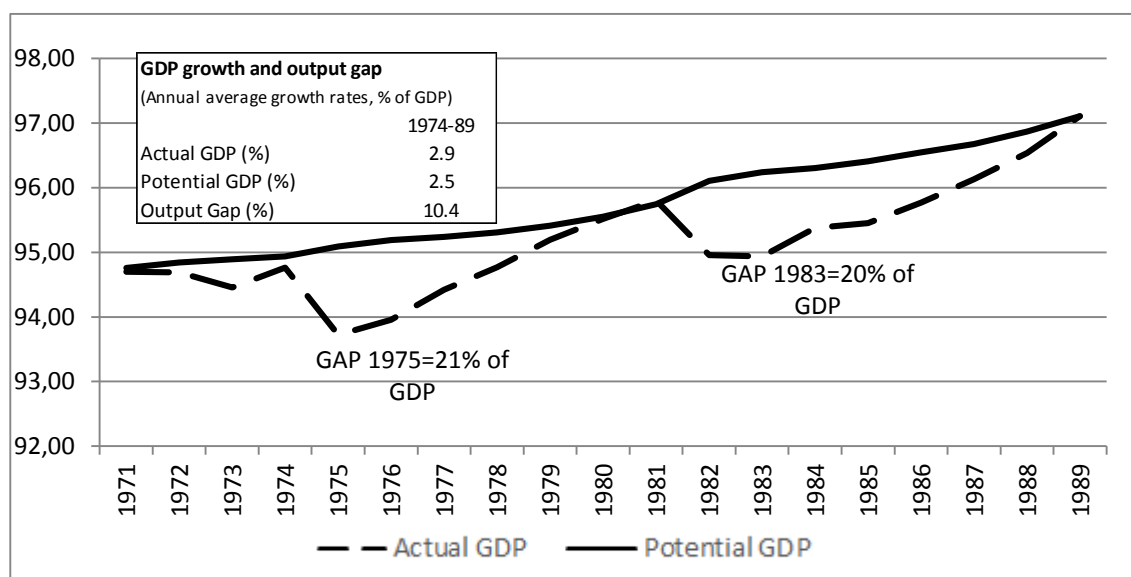
Rodríguez J, Escobar L and Jorrat M (2009). Los ingresos tributarios en el contexto de la política de Balance Estructural. *Estudios de Finanzas Públicas*, Santiago, Ministerio de Hacienda.

Solimano A (1990). Inversión privada y ajuste macroeconómico. La experiencia chilena en la década de los 80, in *Colección Estudios CIEPLAN* 28, March.

Tapia H (2003). Balance estructural del gobierno central de Chile: Análisis y propuestas. *Serie Macroeconomía del Desarrollo*, N°25, CEPAL.

Williamson J (2003). Overview: An Agenda for Restarting Growth and Reform. In: Kuczynski PP and Williamson J, eds., *After the Washington Consensus: Restarting Growth and Reform in Latin America*, Washington, DC, Institute for International Economics.

Figure 1  
**Actual and Potential GDP, 1971-1989**  
 (Log scale, Potential GDP 1996=100)



Source: Estimates in Ffrench-Davis (2010, ch. I, annex).

Table 1  
**GDP, GDP per capita and income distribution, 1974-2013**  
 (annual averages)

	<b>GDP growth (%)</b>	<b>GDP per capita growth (%)</b>	<b>Q5/Q1 ratio</b>	<b>GINI coefficient</b>
	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
<b>1974 – 1981</b>	<b>3.0</b>	<b>1.5</b>	<b>15.1</b>	<b>51.9</b>
1982 – 1989	2.9	1.2	20.2	56.7
<b>1990 – 1995</b>	<b>7.9</b>	<b>6.0</b>	<b>15.3*</b>	<b>52.7*</b>
1996 – 1998	5.8	4.3	16.0	53.2
1999 – 2007	3.9	2.7	15.4	52.7
<b>2008 – 2013</b>	<b>3.9</b>	<b>2.9</b>	<b>12.3</b>	<b>49.2</b>
1990 – 2013	5.1	3.8	14.7	51.9

**Sources:** Ffrench-Davis (2014, cap. XI). Columns 1 and 2 are based on National Accounts from the Central Bank, in 2003 constant prices up to 2005; since 2006, rates of change from the chained base, reference 2008 series. Columns (3) and (4) are based on the University of Chile Employment Survey for Santiago. \* **A 13.7 ratio and a 50.9 Gini in 1992-95.**

Table 2  
**GDPpc (at ppp): Chile as % of USA, G-7 and Latin America, 1973-2013**

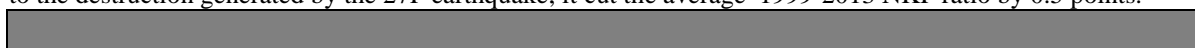
<b>Year</b>	<b>USA</b>	<b>G-7</b>	<b>Latin America</b>
1973	23%	29%	82%
1989	21%	25%	91%
1997	29%	34%	128%
2013	37%	44%	148%

**Source:** Levels of GDPpc in 2012 were determined by IMF estimates in ppp dollars for the four categories of countries. For the previous years, were used the rates of change of real GDPpc of the Central Bank for Chile and the World Bank for the other categories up to 2012; IMF and ECLAC for 2013.

**Table 3**  
**GDP, exports, investment and wages, 1990-2013**  
**(average rates of growth,%)**

		1990-98	1999-2013
1	GDP	7.1	3.9
2	GDP exported	9.9	4.3
3	Rest of GDP	6.5	3.8
4	Net capital formation (% of GDP)	13.1	12.1*
5	Index of real average wages	3.9	2.2
6	Real minimum wage	5.3	3.4

**Source:** Abridged from Ffrench-Davis (2014, table I.7), based on Central Bank and National Institute of Statistics data. \*In line 4, NKF in 2010 was adjusted for an estimated 3% drop in the stock of capital due to the destruction generated by the 27F earthquake; it cut the average 1999-2013 NKF ratio by 0.5 points.



**Table 4**  
**Macroeconomic disequilibrium indicators, 2008-2013**  
**(indexes 2007=100; and annual % change)**

	2007	2012	2013	Annual average
1. GDP	100.0	121.0	125.9	3.9
2. Quantum of exports	100.0	103.0	107.9	1.3
3. Quantum of imports	100.0	140.9	145.6	6.5
4. Real fiscal expenditure	100.0	146.6	153.1	7.4
5. Real fiscal non-copper income	100.0	132.3	136.1	5.3
6. Domestic demand	100.0	135.6	140.2	5.8

**Source:** Abridged from Ffrench-Davis (2014, table X.5). Updated to 2013, based on Central Bank figures for GDP, exports, imports and domestic demand; obtained from the chained base, reference 2008 series. Nominal fiscal figures from the Budget Office, deflated by the annual average CPI, here scaled to 2007=100; rows 4 and 5 correspond to the central government.