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The Nuances of Capital Controls in Economic Development: Argentina and Chile

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Introduction

In the last four years, Argentina has seen both a liberalization of and tightening of monetary and fiscal policy as the economy itself has fluctuated. When Mauricio Macri assumed the presidency in 2015, he began liberalizing the economy and pursuing free market policies. However, over time the administration has been forced to turn back to old policies, reinstating currency and capital controls in an attempt to stabilize the economy "after the government failed to stem heavy investment outflows...to shore up its tumbling currency" (Hunnicutt, 2019). The case of Argentina, especially when compared with that of its neighbor Chile, highlights an interesting component of economic development debates: capital controls. This paper examines how capital controls affect growth and development in developing countries and emerging market economies, using the examples of Chile and Argentina as case studies.

Capital controls include those measures taken, typically by the government, to regulate the flow of foreign capital into and out of the country. They include taxes, tariffs, currency restrictions, bank regulations, and volume restrictions. These controls affect foreign exchange rates, inflation rates, assets, and the overall domestic environment for international investment and trade. Additionally, capital controls can be applied either to specific sectors or to the whole economy, and they can apply to different lengths of flows. Due to the abundance of literature focused specifically on the use of tariffs, this paper will not focus on tariffs.

In seeking to understand the role of capital controls in development, many scholars have looked to Chile, a country often hailed as a paragon of economic development and capital liberalization. It is striking that its neighbor, Argentina, is relatively similar and yet has failed to find an equal level of growth. As a result, Argentina and Chile make an interesting case study: the many similarities between them help control for endogeneity challenges in determining what accounts for the disparity in their economies. Both countries have similar military and political histories, with various military coups and nearly coinciding military juntas in the late 1900s. Both have a variety of terrain (including significant access to oceans), were colonized by Spain, and are among the most urbanized countries in the world (see Figure 1). They also passed laws for women's suffrage in the late 1940s within two years of each other, which is significant given the general recognition of women's rights as being influential in development (Coleman, 2004). The overarching historical and political similarities of the countries are highly important potential sources of endogeneity for which to control in order to more clearly identify the role of capital controls. With respect to capital controls themselves, both Chile and Argentina have had periods of capital control use and capital liberalization. However, they find themselves in different positions. Despite having a higher national GDP than Chile, Argentina's GDP per capita is lower at \$20,900

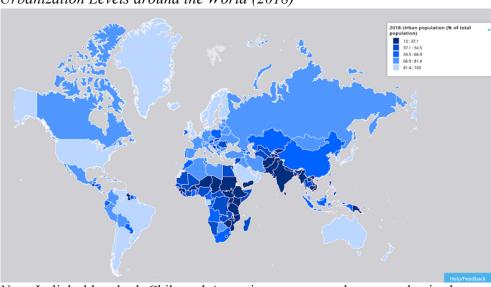


Figure 1
Urbanization Levels around the World (2018)

Note. In light blue, both Chile and Argentina are among the most urbanized countries in the world. Adapted from *World Urbanization Prospects: 2018 Revision*, by United Nations Population Division, 2018 (https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?t ype=shaded&view=map&year=2018). In the public domain.

in 2017, as compared to Chile's \$24,600 (Central Intelligence Agency, 2020a; Central Intelligence Agency, 2020b). Further, while Chile is generally the poster child of transition to market-based stability, Argentina is the poster child of economic crisis.

This paper examines the effects of the implementation and removal of capital controls on economic development, focusing first on economic growth and then considering effects on inequality. It introduces general perspectives on capital controls, analyzing their relationship with investment and growth, economic vulnerability, global integration, and corruption. Each analysis also demonstrates how these elements have evolved in Argentina and Chile. The essay then considers three additional debates about capital controls: it explains why scholars distinguish between types of capital flows, examines how inequality and capital controls are related, and discusses the role of international backing in the success or failure of capital liberalization. It finds that differences in these specific issues help determine the nuanced effects of capital controls. The paper then concludes that in developing countries—particularly those most similar to Chile and Argentina, such as other Latin American countries—removal of capital controls is often dangerous despite the fact that retention of capital controls slows growth and, by extension, economic recovery during crisis. Limiting capital control use to regulation of capital inflows

can minimize the negative effects of capital controls until a country achieves enough stability and international backing to pursue capital liberalization.

A potential challenge stems from the fact that "differences between the *legal* and *actual* degree of capital mobility [have] affected economists' ability to measure the 'true' degree of financial integration of particular countries" (Edwards, 1999, p. 67). That is, evasion causes the degree of capital mobility to be larger than what legal restrictions suggest, making it challenging to accurately measure the effects of capital controls. However, this is not detrimental. Evasion can be expected to be a challenge for both Chile and Argentina, and in fact *has* been despite attempts by both countries to prevent it. This means that the challenge of evasion results in simple measurement error and that the conclusion reached applies not so much to capital controls as a *theory*, but rather to specific capital controls as they *practically function*. Additionally, controls that successfully eliminate evasion are likely to amplify any positive or negative effects found rather than alter them entirely.

Effects of Capital Controls

Overall, the discussion of the international implementation of capital controls has become more nuanced over time. Many recognize that capital controls are generally undesirable for economic growth, primarily due to their negative effects on investment, productivity, and trade. As a result, most countries have moved in the direction of capital and financial liberalization, with debate centered more on the timing and speed of this liberalization (Edwards, 1999; Obstfeld, 2009) rather than whether it should happen. Within this debate, however, there is a valid defense of the temporary retention of capital controls.

Those in favor of capital controls argue that "in a world with imperfect information, free capital mobility is likely to amplify existing distortions, create situations of moral hazard, encourage excessive risk taking, and generate major and costly crises" (Edwards, 1999, p. 66). The removal of capital controls, therefore, can allow or even prompt behavior that worsens development problems and economic crises. This is particularly true in developing countries, where there is often a lower capacity to address moral hazard or negative market distortions. Developing countries also tend to be the countries most affected by the capital liberalization debate due to the desire for economic growth or recovery from economic crisis. While elimination of capital controls typically enables economic growth in industrialized countries with stable institutions, developing countries that lack stable institutions or are already in the midst of economic crisis can suffer from additional instability wrought by liberalization.

On Investment, Growth, and Global Integration

On the one hand, capital controls hinder economic growth through a variety of mechanisms, especially through their effect on a country's foreign domestic investment (FDI), growth, and global integration. Because capital controls often directly restrict various types of foreign investment, they naturally decrease FDI. This can be problematic for achieving maximum growth given that FDI supplements domestic investment, which is particularly important when domestic investment is low (Arceneaux & Pion-Berlin, 2005). Other types of controls, like taxes and tariffs, change incentives and increase the costs of doing business with the country in question, thereby drawing labor and capital away and decreasing productivity and trade. Currency controls have a similar effect: currency restrictions often result in a high "black market premium [that] acts as a tax on exporters" (Easterly, 2002, p. 222), decreasing exports and driving down GDP. These decreases, especially in combination with other capital restrictions, limit trade participation and integration of the national economy into the global market. Elimination of capital controls, however, can facilitate integration into the worldwide financial system (Schiffrin, 2004), as is important in an increasingly globalized world.

However, research on the relationship between investment, economic growth, and elimination of capital controls is less conclusive than this theory suggests. Capital liberalization does not boost economic growth across the board, but rather only under specific conditions. Most capital controls, regardless of their specific form, focus on restricting capital flows in the form of investment to reduce the risk of volatility. One study analyzing cross-sectional data, panel data, and additional studies finds that "there is strikingly little convincing documentation of direct positive impacts of financial opening on the economic welfare levels or growth rates of developing countries" (Obstfeld, 2009, Abstract). Financial opening does promote increases in FDI. However, increases in FDI imply increased reliance on foreign nations' capital and consequently greater financial vulnerability to volatile interests and decisions of those nations (Arceneaux & Pion-Berlin, 2005). In many industrialized countries, the national economy is able to absorb the volatility. In developing countries, however, economies and institutions are often too weak and unstable to do so. As a result, "the policy conclusion is generally that in order to reap the benefits from...integration, [capital liberalization] must be done within a healthy regulatory and supervisory framework" (De Gregorio, 2014, p. 278). Without such a framework, the country becomes more vulnerable and less likely to experience improved growth rates or economic welfare.

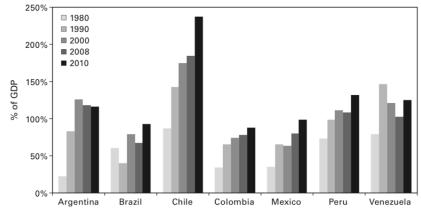
Investment, Growth, and Integration in Chile and Argentina

Both Chile and Argentina began to pursue capital and financial liberalization in the 1970s. Chile liberalized around 1973, then reinstated capital

controls from 1978 to 1982 and again from 1991-1998 (Maute, 2006). Argentina pursued liberalization during the same period, though it also reinstated some capital controls in the 1980s. The picture of growth is not a clear one. On the one hand, both Argentina and Chile experienced recessions, with Chile experiencing the deepest recession in the region in the 1970s (Frenkel, 2002). At first glance, this contradicts the theory that capital liberalization results in growth. However, the reinstitution of capital controls did not cure both countries' economic woes either. Both Argentina and Chile reinstituted capital controls to aid economic recovery, yet the results have fluctuated significantly between booms and recessions and do not follow the same patterns within the two countries.

Global integration offers both evidence of the differing fluctuations and an explanation for those fluctuations. Given the high level of international integration in Chile in 2010 (see Figure 2), the removal of capital controls *does* appear to have increased Chile's global integration in a way that it did not in Argentina. However, Chile did still have capital controls in both 1980 and 1990, at which point it demonstrated an already-high level of financial integration. In fact, it had a higher level of international financial integration prior to capital liberalization than Argentina had *after* liberalizing. This suggests that a minimum level of international integration is a prerequisite for successful capital liberalization. It also coincides with the broader academic conclusion that "economies need a minimum

Figure 2
International Financial Integration in Latin American Countries



Note. International financial integration measured as international assets plus liabilities, as a percentage of GDP. Adapted from Lane and Milesi-Ferretti database, as cited in "Capital Flows and Capital Account Management," by J. De Gregorio, 2014, in *What Have We Learned: Macroeconomic Policy after the* Crisis, edited by G. Akerlof, O. Blanchard, D. Romer, and J. Stiglitz, p. 281. Copyright 2014 by International Monetary Fund and Massachusetts Institute of Technology.

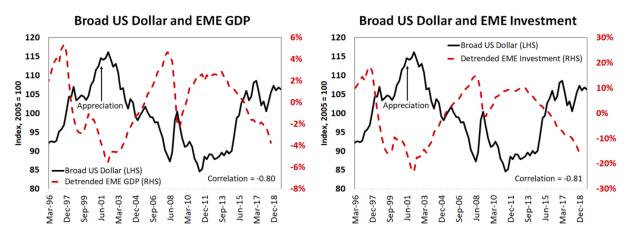
level of governance, institutional development, quality of macroeconomic policies, and other characteristics to be able to absorb capital flows without detrimental effects on growth" (De Gregorio, 2014, p. 279). Capital liberalization is indeed economically beneficial, but only under specific conditions. Argentina, with its lower levels of global investment and integration, did not have those conditions.

On Economic Vulnerability

The importance of these "conditions" is again demonstrated in the relationship between capital controls and economic vulnerability. Most economists "now generally agree that rapid liberalization of capital markets can be dangerous for developing countries unless they have a stable macroeconomy, strong banking sectors, and developed ways of overseeing the financial sector" (Schiffrin, 2004, p. 60). Without these requirements, markets are ill-equipped to respond to international economic instabilities. As a result, if a country has weaker institutions and a less reliable macroeconomic framework—as is the case in many emerging market economies—then retaining capital controls can help minimize vulnerability to fluctuations in the international market.

The economy's vulnerability to changes in the value of the U.S. dollar demonstrates how this would work. Figure 3 reflects how dollar appreciations lead to declines in GDP in emerging market economies. Opening financial markets too quickly makes countries highly vulnerable to unforeseeable shifts in capital flows

Figure 3
U.S. Dollar and Emerging Market Economies' GDP and Investment Cycles



Note. In emerging market economies, dollar appreciations coincide with falls in GDP and investment. Adapted from *The Dollar and Emerging Market Economies: Financial Vulnerabilities Meet the International Trade System* (International Finance Discussion Papers No. 1258), by S. Shousa, 2019, p. 2 (https://doi.org/10.17016/IFDP.2019.1258).

and exchange rate volatility (Schiffrin, 2004; Kanas, 2001). The effects of such vulnerability are reflected by the dashed red lines in Figure 3. Dollar appreciations coincide with falls in GDP and investment. Capital controls (especially controls on the exchange rate) can help insulate the economy from such effects by flattening the dashed line, protecting against falls in GDP and investment but also detracting from the peaks.

Proponents of capital liberalization point out that the "increased integration into international supply chains" typically implied in capital liberalization also "leads trade flows to be less sensitive to exchange rate movements" (Shousa, 2019, p. 3), decreasing economic vulnerability without capital controls. However, the differences in the levels of integration of Argentina and Chile noted in Figure 1 demonstrate that integration does not automatically result from liberalization. A country that liberalizes before having some minimum level of international integration exposes its financial vulnerabilities without the protection offered by integration into international supply chains. In this case, the shocks of dollar appreciations or changes in capital flows can outweigh the benefits of the volatile incipient stages of capital liberalization and integration. Given all of this, it is prudent for countries lacking strong institutions and a minimum level of international integration (though "strong" and "minimum level" are difficult to define concretely) to retain capital controls in order to protect themselves from further economic vulnerability, despite potential loss of growth.

Heightened Economic Vulnerability in Argentina

In discussing how removal of capital controls exposes an economy to further vulnerability, Argentina's recent experience is particularly pertinent. Since Mauricio Macri's pursuit of liberalization in 2015, the country has had the painful experience of watching its currency depreciate against the U.S. dollar as the currency adjusts to the market rate. The average Argentine citizen has, as a result, been living with the typical day-to-day challenges of high inflation, including full exposure to daily changes in the exchange rate. In the 24 hours following the 2019 primary election results that placed Alberto Fernández above Mauricio Macri, many international investors withdrew their investments in Argentina from fear of Fernández placing strict controls and limitations on foreign business operations in an already economically challenging country. As a result, the Argentine peso lost another 25% of its value against the U.S. dollar in a single day (Meredith, 2019). Adapting to such a drop proves difficult for all parties, whether individual citizens or large businesses. Had capital controls limited international investment from the start, the total investment and consequent withdrawal and depreciation would not have been as large. However, had the country not been in an economic crisis, international investors might not have withdrawn as much, or the economy might have been more capable of handling the withdrawal. Argentina demonstrates how

capital liberalization increases economic vulnerability to international fluctuations. The conditions surrounding liberalization, such as whether the country is already in crisis or has strong institutions, determine whether that economic vulnerability is too great to be absorbed.

On Corruption and Institutional Capacity

Capital controls also provide an opening for increased corruption, especially when a country lacks strong institutions (as is common in developing countries). In this case, capital controls are rendered both corrupt *and* ineffective.

Simply put, capital controls create the opportunity for corruption (Edwards, 1999; Maute, 2006; Schiffrin, 2004). Where there are more rules in place, there are more opportunities for corruption. Currency controls, for instance, can create a high black market premium by driving up the perceived value of U.S. dollars and intensifying competition for licenses to buy U.S. dollars (Easterly, 2002). As restrictions and competition increase, the payoffs for helping others evade the restrictions also increase, producing greater incentives to participate in the black market economy. At its best, high participation in the black market economy simply detracts from growth in the legal economy. At its worst, black market participation fosters an environment of corruption in which public officials have increasingly high incentives to profit through corrupt acts, such as accepting bribes from those seeking to obtain U.S. dollars.

Institutional corruption, in turn, weakens institutional strength. A country with high levels of corruption is naturally more likely to have funds misdirected or "skimmed off the top," to perpetuate inequality between those who can afford to pay bribes and those who cannot, and to pursue programs and policies that benefit a small niche rather than the general population. It is difficult to quantify the strength of a country's institutions for comparison against corruption levels. However, a potential symptom of lack of institutional capacity is the failure to meet societal desires for improved health, education, and living standards. The Human Development Index uses these very measurements to rank countries by their level of "human development." A higher Human Development Index score indicates higher levels of across-the-board health, educational, and living standards, while a higher Corruption Perception Index score indicates less corruption. Figure 4 plots these two scores against each other, resulting in a clear positive correlation. That is, on average countries with higher perceptions of corruption have correspondingly low scores in the Human Development Index. There is likely to be a similar

¹ Using data provided by Transparency International (2018) and the United Nations Development Programme (2019), a regression controlling for differences between countries and time-specific errors finds the relationship to be statistically significant at the 0.1% level. Again, this says nothing about causality, and it is not surprising that these measures would be correlated. The regression simply confirms that the two are indeed closely correlated.

correlation between higher perceptions of corruption and lower institutional capacities. These results are, of course, far from definitive, based on averages, and say nothing of causality. However, they provide a basis for continued exploration of the relationship between corruption and institutions.

Irrespective of whether corruption actively worsens institutional capacity, institutional strength itself is an important element of the capital control debate. A major criticism of capital controls is that they are hard to enforce (Schiffrin, 2004). A country already lacking sound institutions and mechanisms for enforcing rule of law in general—as is the case for most developing countries—is unlikely to enforce capital controls to a sufficient degree to reap their expected benefits. Broadly speaking, the usefulness of capital controls comes down to whether potential stabilization is significant enough to offset the other challenges that worsen as a result.

Figure 4
Human Development Index vs. Corruption Perception Index



Note. Higher levels of corruption appear to be positively correlated with lower levels of "human development," as defined by the Human Corruption Index. Adapted from Corruption Perceptions Index, by Transparency International, 2018, (https://www.transparency.org/research/cpi) and from Human Development Data, by United Nations Development Programme, 2019, (http://hdr.undp.org/en/data) using Gapminder Tools (https://www.gapminder.org/tools/). In the public domain.

Institutional Corruption in Argentina and Chile

Argentina's experiences with both capital restrictions and capital liberalization demonstrate many of the negative effects of each. In the years following the Great Depression of the 1920s, Argentina began following more of a closed economy (i.e. capital control-friendly) strategy, but in addition to hindering economic efficiency and growth, this strategy produced corruption (Maute, 2006). Liberalization over the course of the 1970s, 80s, and 90s, however, has not necessarily fixed that corruption.

From 2003 through 2015, either Cristina Kirchner or her husband, Nestor Kirchner, held the Argentine presidency. As center-left Peronists, the two reinstated various controls and policies that resulted in "rampant corruption during their combined mandates" (Vargas Llosa, 2010, as cited in Manzetti, 2014, p. 176). However, since the 1990s Argentina has had both center-right and center-left presidents, and "in both cases, corruption has tended to go unchecked due to insufficient government accountability" (Manzetti, p. 173). To an extent, corruption has simply become a part of Argentina's political system, as is the case in many other Latin American countries. As a result, it is difficult to determine how much of the perceived corruption under the Kirchner regimes was a continuation of prior corruption, and how much resulted from their policies and capital controls. Problems with capital controls have arisen under Macri as well, although in terms of general enforcement and institutional weakness rather than corruption of officials. A news article from *Clarin Digital* explains that in the beginning of 2019, many Argentines found ways to get around the limits on how many dollars they could purchase each month (Bazzan, 2019). As expected, capital controls proved difficult to enforce.

Chile's capital controls did not foster as much blatant corruption but did lead to greater institutional weakness. After relaxing controls for a few years, Chile restricted inflows again in 1991. As in Argentina, the private sector found many ways around these controls, such as misstating the purpose of funds. Though the Chilean government responded by extending coverage of controls to include trade credits and FDI loans, large firms with international connections and access to finance had "the connections and ability to reconfigure their assets in a way that [circumvented] controls" (Edwards, 1999, p. 72). The prevalence of circumvention demonstrates the general weakness of the institutions in the face of capital controls.

Further Capital Control Debates

Having examined the ways in which capital controls affect a country's development, it is important to consider additional debates that inform why countries experience the effects in different proportions. The distinction between

capital outflows and inflows is vital, as a country's choice to focus on controlling one or the other often determines the success of capital controls as a tool for stabilization. Additionally, debates over the trade-off between open capital markets and inequality touch on social justice questions that must be addressed. Lastly, a country's international backing is found to be another determinant of the success of capital control policies.

Capital Outflows and Inflows

Some scholars argue that contrary to theory, capital controls do not detract from growth. One study concludes that "after controlling for other variables, capital restrictions have no significant effects on macroeconomic performance" (Rodrik, 1998, as cited in Edwards, 1999, p. 68). If this is true, then the benefits of capital liberalization are largely eliminated, and the apparent trade-off between stability and growth disappears. However, Edwards suggests that Rodrik's conclusion is based on IMF indexes that fail to distinguish two things: first, the intensity of various levels of capital restrictions; and second, the *type of flow* that the controls restrict. This criticism introduces a crucial distinction between capital outflows and capital inflows.

Current research suggests that restrictions on capital *outflows* affect the economy differently than restrictions on capital *inflows*. These two types of capital flows are, essentially, what they sound like. Capital outflows refer to capital or assets leaving an economy, while capital inflows refer to capital entering an economy. Increasing foreign investment in the domestic economy, for example, increases capital inflows. Identifying which flows are targeted by a country's policies helps scholars determine the true extent of those policies' effectiveness.

In general, controls on outflows prove to be ineffective in slowing down or preventing crisis. Such controls generally include some combination of taxes on funds remitted abroad, dual exchange rates, prohibitions on the transfer of funds, or withdrawal limits at banks. During the Latin American debt crisis in the 1980s, Argentina, Brazil, and Mexico increased their controls on capital outflows and "still experienced a long and painful decline in growth, high inflation and protracted unemployment" (Edwards, 1999, p. 70). Their experiences contradicted arguments that capital controls give a country room to recover. In fact, in roughly 70 percent of cases in which controls on outflows were used to prevent capital flight, there was instead a significant *increase* in capital flight (Edwards). By signaling fear of crisis to the international community, controls backfired. They hastened the economic crisis while, as noted previously, encouraging corruption or exacerbating institutional weakness.

Inflows, on the other hand, are prone to instability (hence the desire to control them) but also contain foreign direct investment, "the most important and stable component of inflows in Latin America" (De Gregorio, 2014, p. 275).

Controls on inflows enable countries to "change the composition of flows or reduce some specific inflows, such as excessive...short-term banking flows. In this case, the control would be serving a financial stability purpose" (De Gregorio, p. 282). De Gregorio points to Asia during the global financial crisis of 2007-08 as proof that volatility in inflows worsens crises. In Asia, he argues, inflows were made up more of banking debt flows, which are more volatile. As a result, the crisis in Asia in 2008 was more severe than in Latin America, where capital inflows were composed of proportionally fewer banking debt flows. Controlling the composition of inflows, therefore, can minimize volatility and thereby help minimize crisis.

Controlling Outflows in Argentina, Inflows in Chile

In the Argentina-Chile comparison, both countries have had episodic capital controls over time. However, Argentina's controls often restricted capital outflows, while Chile's controls focused on controlling inflows. This difference is a crucial component of why Chile's controls have generally been more successful in promoting economic growth.

In Argentina, capital controls were imposed on both outflows and inflows prior to the 1970s. However, the Latin American debt crisis of the 1970s and 1980s were a formidable obstacle to Argentina's liberalization and reform process. In response to the crisis, the country reinstated a fixed exchange rate while continuing to eliminate trade barriers. Though macroeconomic performance initially improved, it did not last due to high exposure to volatility in short-term international capital flows (Stanley, 2018). A series of global financial crises in the 1990s further decreased capital inflows into Argentina and, by extension, drove down national GDP (Stanley, 2018). Argentina again began tightening controls by prohibiting foreign currency transactions (controlling outflows) and imposing minimum stay requirements (controlling inflows). As before, the economy initially appeared to recover, but it did not stabilize long-term. Capital controls have since been implemented and removed repeatedly within a continually volatile market. While capital controls might have provided a short-term bandage, they have not provided a foundation for long-term stability and growth in Argentina.

Chile, on the other hand, has focused primarily on taxes and regulations concerning the stay requirements for capital flowing *into* the country and has generally enjoyed positive economic growth and corresponding improvements in various measures of well-being. Edwards (1999) summarizes the argument in favor of Chile's capital controls as follows: "By discouraging short-term capital, while still attracting longer-term funds, Chile's controls have helped the country achieve a remarkable record of growth and stability" (p. 71). Chile did so by changing reserve requirements and interest rates for inflows to prohibit or discourage shorter-term flows while encouraging longer-term flows. In 1978, Chile prohibited inflows with maturities below 24 months and subjected inflows with maturities between 24

and 66 months to a 10-25% reserve requirement (Edwards). In 1991, Chile subjected all inflows to a 20% reserve requirement (Edwards). This system essentially functioned as a tax on capital inflows under which a longer stay in the country resulted in a lower implicit tax rate. The private sector did find ways of evading the controls. Even so, Chile did manage to change the composition of capital inflows. Figure 5 reflects this change, as short-term flows made up 90.3% of gross capital inflows the year before capital controls were implemented and only 2.8% the year before controls were removed. One of Argentina's challenges had been high vulnerability to changes in inflows, as short-term inflows could be removed from the country during crisis and worsen its economic situation. Chile, however, minmized reliance on such volatile inflows. This difference helps explain why capital controls facilitated economic stability in Chile but have not had the same effect in Argentina.

Capital Liberalization and Inequality

One aspect of the argument in favor of capital controls has not yet been addressed: their effect on inequality. Some scholars criticize capital liberalization and open markets in general as mechanisms that increase the gap between the rich and poor. One study by Furceri and Loungani (2015) found that on average, there is indeed a positive relationship between capital mobility and inequality. This relationship suggests that decreasing capital mobility through capital controls should also

Figure 5
Capital Inflow Composition in Chile During Capital Control Use

Year	Short-term flows	Percentage of total	Long-term flows	Percentage of total
1988	916,564	96.3	34,838	3.7
1989	1,452,595	95.0	77.122	5.0
1990	1,683,149	90.3	181,419	9.7
1991	521,198	72.7	196,115	27.3
1992	225,197	28.9	554,072	71.1
1993	159,462	23.6	515,147	76.4
1994	161,575	16.5	819,699	83.5
1995	69,675	6.2	1,051,829	93.8
1996	67,254	3.2	2,042,456	96.8
1997	81,131	2.8	2,805,882	97.2

Note. Gross foreign capital flowing into Chile, measured in millions of U.S. dollars. Short-term flows are those with a stay of less than one year. Adapted from "How Effective are Capital Controls?" by S. Edwards, 1999, *Journal of Economic Perspectives*, *13*(4), p. 74. Copyright 1999 by American Economic Association.

decrease inequality, which leads to the question of whether growth should be sacrificed in the name of equality. Another study by Andres Bergh and Therese Nilsson (2010) compared "freedom to trade internationally" with inequality and also found them to be robustly and positively related. Policy makers could therefore argue that removal of capital controls in pursuit of growth is "wrong." However, the finding is more nuanced than it initially appears: "Reforms toward economic freedom seem to increase inequality mainly in rich countries, and social globalization is more important in less developed countries. Monetary reforms, legal reforms, and political globalization do not increase inequality" (Bergh & Nilsson, Abstract). This suggests that the ways and realms in which liberalization is pursued play a role in determining whether inequality increases. Similarly, other studies find that although capital mobility and inequality are positively correlated, there is little evidence for a causal link between international openness and increasing inequality (Odedokun, 2001; Fauser, 2014). This implies that capital liberalization need not come at the expense of equality and social justice ideals. In light of the 2019 protests in Chile over inequality, this is an appropriate issue to consider.

César Calderón and Alberto Chong (2001) examine the sources of income inequality using panel data. The study finds that the previous period's Gini coefficient, schooling, the real exchange rate, and the black market premium are significant determinants of inequality in the current period. Past inequality in particular is highly statistically significant (Calderón & Chong). On the one hand, this is no surprise. It is nearly impossible for a country to experience a sudden, massive change in inequality over the course of one period. On the other hand, it means that a country with historically high inequality has greater barriers to overcome in achieving lower levels of inequality, regardless of policy decisions.

Additionally, Calderón and Chong (2001) find that there is a negative significant relationship between the intensity of capital controls and income inequality. That is, looser controls predict an increase in income inequality. This coincides with the studies by Furceri and Loungani (2015) and Bergh and Nilsson (2010). However, this relationship is substantively small, implying that the presence or lack of capital controls only explains a fraction of inequality. This suggests that equitable growth is not inherently incompatible with capital liberalization. Instead, inequality depends on the presence of strong, trustworthy institutions that properly redistribute growth.

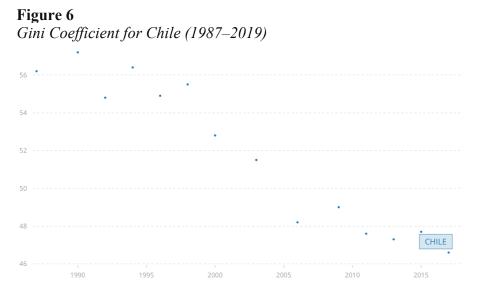
Inequality in Argentina and Chile

There are few studies on the causes of inequality in Argentina, but most focus on social mobility or political power. That said, wage inequality is observed to have greatly increased during the 1990s, part of the period associated with Argentina's neoliberal reform and trade liberalization process. As a result, it is easy

to blame that rising inequality on capital liberalization. However, one study analyzing the relationship between trade liberalization and wage inequality in Argentina finds that if trade liberalization does indeed lead to a rise in wage inequality, it can only explain a small part of any observed rise (Galiani & Sanguinetti). That is, capital liberalization cannot take all the blame for increasing inequality. This finding echoes the study by Calderón and Chong (2001).

Any attempt to explain contemporary Chilean protests over inequality and economic injustice is limited, as the protests are still ongoing as of March 2020. The protests broke out in 2019, a year in which the Gini coefficient was the lowest yet since 1990. Figure 6 depicts the steady decrease in the Gini coefficient over the last two decades (though it is undoubtedly still high). Inequality *has* been improving, so it is interesting that the protests broke out in 2019 and not earlier, when inequality was higher. An opinion article published on the Cato Institute's website gives an interesting (though not proven) analysis of why this may be:

Growth experienced a significant slowdown during the previous government, and Piñera has not reversed anti-growth policies introduced by his predecessor...The resulting stagnant wages combined with greater government spending and taxation without a corresponding improvement in the quality of public services [emphasis added] has contributed to Chileans' malaise. So have the corruption scandals that erupted during the previous government. (Vásquez, 2019, Causes of Discontent section)



Note. The Gini coefficient in Chile has been steadily decreasing since 1990. Adapted from "Gini Index (World Bank Estimate)—Chile," by the Development Research Group, 2019 (https://data.worldbank.org/indicator/SI.POV.GINI?locations=CL). In the public domain.

Like the studies by Bergh and Nilsson (2010) and Calderón and Chong (2001), this theory argues that capital liberalization (as pursued in Chile since roughly 2001) does not in itself lead to a massive rise in inequality. Instead, it is failure of governmental institutions to redistribute increases in growth in an equitable way that leads to the public outcry against inequality and economic injustice. Of course, this theory is not definitive and does not prove that capital controls have no role in decreasing inequality. It merely demonstrates that the relationship is complicated and that arguments for retaining capital controls to prevent inequality and economic injustice should be examined further and examined rigorously.

The Role of International Backing

In addition to differentiation between capital inflows and outflows, a potential explanation for country-to-country differences in the effects of capital reform is the role of international backing. Craig Arceneaux and David Pion-Berlin (2005) explain that in general, successful neoliberal reform (including removal of capital controls) "relies on backing from the outside." This backing is dependent on "the divergent motivations of these three actors—business, government, and [international financial institutions]" (pp. 44-45). In an ideal world, this would result in foreign investment and trade flowing between the countries that, for example, protect human rights or demonstrate the least corruption. Such ideals, however, do not always hold up to reality.

In pursuing neoliberal reform, Latin American political leaders "must open a route of international influence if neoliberal reform is to succeed, but who travels on that route is largely out of their hands" (Arceneaux & Pion-Berlin, 2005, p. 43). This means leaders must expose themselves to all of the vulnerability associated with neoliberal reform and capital liberalization while having little control over the process once they have transitioned away from capital controls. Whether or not their decision pays off is largely in the hands of the rest of the world as the world decides how to interact with the opened country. The aforementioned "three actors" with their "divergent motivations" complicate the picture. Governments, for example, might choose to engage with strategic countries that are closed-off economically, while the IMF seeks out countries pursuing economic reform. The two actors have diverging motivations. As a result, there is no easy set of rules to follow in order to receive international backing by all three actors.

The influential presence of these actors in various combinations ensures "a steady stream of foreign influence...as well as unique combinations of outside involvement from country to country" (Arceneaux & Pion-Berlin, 2005, p. 44). In the previous hypothetical example, the closed-off strategic country would be influenced by a foreign government with little IMF presence, while the open country would experience the opposite. In some cases, a country might have a strong presence of two actors but be lacking the third entirely. In their study,

Arceneaux and Pion-Berlin compare the cases of Argentina and Chile, as considered now.

The Competition for International Backing: Argentina vs. Chile

In the late 1970s both Argentina and Chile began a process of pursuing general neoliberal reform. Their paths, however, have diverged. Argentina is perpetually in crisis while Chile is seen as a model of economic success. Arceneaux and Pion-Berlin (2005) argue that the divergence stems from differences in international support: "Argentina, lacking the market opportunities of Brazil and political unity of Chile, finds itself in an unfortunate position. Despite considerable showings of neoliberal concurrence, international support for the country falls behind the levels secured by its neighbors" (p. 47). In the 1990s, Argentina was generally more compliant with neoliberal reform requirements and liberalized more quickly. The "general reform index" in Figure 7 lists each country's average of five scores that quantify markers of neoliberal reform. Chile's general reform score is lower than Argentina's primarily due to its capital liberalization score in Figure 8. The lower score reflects the retention of some capital controls, which is no surprise given that these measurements were taken in the middle of Chile's second period of capital control implementation (1991-98). Notably, despite Argentina's higher reform scores, it is Chile that receives support from all three actors involved in international backing rather than Argentina. Therefore, pursuit of economic principles and reform is not the final determinant of international backing.

Figure 7
General Reform Index (1995)

Uruguay	.891	Bolivia	.816
Argentina	.888	Mexico	.807
El Salvador	.872	Brazil	.805
Dominican Republic	.862	Ecuador	.801
Costa Rica	.847	Colombia	.792
Peru	.845	Honduras	.780
Chile	.843	Jamaica	.767
Guatemala	.838	Venezuela	.667
Paraguay	.834		

Note. Adapted from *Indices of Structural Reform in Latin America*, by S. A. Morley, R. Machado, and S. Pettinato, 1999, as cited in "Neoliberal Reform in Argentina, Brazil, and Chile," by C. Arceneaux, and D. Pion-Berlin, 2005, in *Transforming Latin America: The International and Domestic Origins of Change*, p. 54 (https://doi.org/10.2307/j.ctt9qh5d7.6/). Copyright 2005 by University of Pittsburgh Press.

Figure 8
Structural Reform Categories and Scores (1995)

	Commercial	Financial	Capital	Privatization	Tax	Avg. Rank
Argentina	.934 (13)	.986 (1)	.986 (3)	1.00 (1)	.534 (10)	5.6
Chile	.984 (2)	.983 (2)	.745 (15)	.840 (7)	.663 (4)	6.0
Brazil	.930 (14)	.971 (5)	.639 (17)	.813 (9)	.674 (3)	9.6

Note. Overall rankings noted in parentheses. Argentina has, on average, a higher ranking than Chile. Adapted from *Prospects for Free Trade in the Americas*, by J. Schott, as cited in "Neoliberal Reform in Argentina, Brazil, and Chile," by C. Arceneaux, and D. Pion-Berlin, 2005, in *Transforming Latin America: The International and Domestic Origins of Change*, p. 54 (https://doi.org/ 10.2307/j.ctt9qh5d7.6/). Copyright 2005 by University of Pittsburgh Press.

The ongoing poor economic performance of Argentina relative to Chile reflects this lack of support. At the end of the 1990s, the IMF was the main actor supporting Argentina; however, "because international support hinges on the conduct of all three parties, the IMF could only

postpone (and may have even intensified) an economic crisis in Argentina" (Arceneaux & Pion-Berlin, 2005, p. 47). This lack of support appears relatively arbitrary, as Argentina could have done little more to "earn" support. Simply put, the U.S. and other powerful actors were (and often continue to be) relatively indifferent to Argentina.

This does not mean, however, that a country's policy decisions are futile. In their paper, Arceneaux and Pion-Berlin (2005) conclude that "without international support, the prospects for success decline considerably" (p. 83). The prospects worsen, but success is not out of the question. If another study, for example, found that democracy increases a country's *prospects* for gains in civil liberties, it is still possible for a democracy to experience an erosion of civil liberties. Democracy merely worsens an aspiring dictator's prospects of restricting citizens' freedoms. The same thought process applies to international backing and successful reform: lack of international support does not make successful capital liberalization impossible; it simply constitutes an additional obstacle to face.

Additionally, the study by Arceneaux and Pion-Berlin (2005) is concerned with the success of overall neoliberal reform (hence the measurements in four categories in addition to capital liberalization). Had Argentina limited its capital controls to controls on inflows, Argentina might have had a capital reform score closer to that of Chile and had greater overall economic success despite the lack of international backing. More cautious reforms that retained capital controls on

inflows might have at least minimized or slowed some elements of Argentina's economic crisis.

Conclusion

The former section suggests that Chile's restrictions on capital inflows followed by eventual capital liberalization were not successful solely because of the policy decision itself. Rather, removing capital controls improved economic growth in Chile because Chile had international backing, but removal worsened economic crisis in Argentina because Argentina lacked that backing. The presence of international support, therefore, amplifies the benefits of removing capital controls, while the lack of international support amplifies the dangers. As a result, the benefits and dangers of removing capital controls must be considered in light of classic economic concerns in addition to the question of international backing. In all, although capital account liberalization should generally be pursued in order to further economic growth, it should be done cautiously, under specific conditions of institutional strength and with considerations of the international environment. Until those conditions are met, retention of capital controls provides a level of stability and insulation for emerging economies, especially when using controls on capital inflows rather than outflows to minimize volatility and maximize any potential for growth.

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