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# Debt and development in historical perspective: The external constraints of late industrialisation revisited through South Korea and Brazil

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## 1 | INTRODUCTION

The subject of external debt and development is caught between an orthodox rock and a neo-developmental hard place. From the side of the rock, it is generally acknowledged that external finance is needed to assist the development of poorer countries. However, this is conjoined with advocacy for open capital accounts and the vanguardism of foreign direct investment (FDI). It is also in dissonance with the well-known fact that global flows have generally been in the reverse since the early 1980s, from poor to rich countries (mainly the USA). In response, scholars from the industrial policy or developmental state literatures have been critical of reliance on external finance in the light of the dangers of dependency, vulnerability and instability that this can instil. However, such critique has encouraged a tendency to emphasise (perhaps overemphasise) a domestic productionist reading of the East Asian development experience (e.g., Chang, 2002, among others).

In this respect, a degree of cognitive dissonance also reigns at the heart of the neo-developmental advocacy against reliance on external finance and, instead, for a reliance on exports to cover foreign exchange needs. This position was endorsed in 2010, for instance, by a wide range of eminent keynesian and structuralist economists in a manifesto entitled “Ten theses on new developmentalism” (NDP, 2011). Carlos Bresser-Pereira, one of the leading proponents of this manifesto, has since erroneously asserted on a regular basis that East Asian countries did not rely on foreign savings in the 1970s and that this differentiated them from Latin America (e.g., Bresser-Pereira, 2016). The signatories also included some of the leading scholars of East Asian industrialisation, such as the late Alice Amsden, whose own earlier work clearly demonstrated the deep reliance of South Korea on external finance (e.g., Amsden, 1989). Hence, while the manifesto played an important political role at a crucial moment following the global financial crisis, particularly in trying to break the fixation with the allure of foreign finance, it did not lend empirical credibility to this important objective.

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Rather, the post-war experience of East Asia lends support to the classic structuralist understanding of foreign exchange constraints faced by late-industrialising countries due to their structural tendency to run trade deficits. Foreign exchange constraints in turn have been the perpetual driver for such countries to seek external sources of finance, and the constraints and opportunities to access foreign exchange have also been crucial factors in shaping the political economy of their industrialisation strategies. This classic understanding was supported by the subsequent theorisation of Thirlwall (1979) on balance of payments constrained growth, although his work was not necessarily contextualised by an analysis of industrialisation. Thirlwall (2011) also reviews the various efforts of others to augment his original model by including capital flows, but summarises that capital inflows made no substantial difference to the prediction of these models. He argues that this is because countries are limited in their ability to sustain current account deficits relative to GDP and that export growth is “by far the most important variable governing growth performance” (Thirlwall, 2011, p. 28). However, this begs the question about the dynamic interactions between export growth and capital flows. In particular, efforts to increase manufacturing exports can counter-intuitively exacerbate trade deficits in the short to medium term, for long enough to potentially destabilise such growth efforts in the absence of compensating financial flows.

This article departs from these deductive modelling approaches and instead adopts an inductive historical approach to set the record straight in the contemporary literature. The record is that successful late industrialisers, namely, South Korea and Taiwan, ran intensive trade deficits for long periods of time, even as they were pursuing export-oriented industrialisation. They were able to do this because of advantageous supplies of external finance (and aid), in particular during key moments of global crisis when their growth episodes could have easily been derailed, as in many other countries. Finance was also supplied in a manner that allowed them to avoid dependency, such as debt instead of FDI in the case of South Korea. Conversely, the inability to do the same, under much less advantageous external financing conditions, is arguably a crucial factor explaining the far less successful industrialisation efforts in most other late-industrialising countries. In this sense, Thirlwall’s contention mentioned above might be considered a general rule facing most developing countries, but not necessarily the most successful.

The particular Cold War circumstances of East Asia might lead some to discount the regional experience as an exception. However, the experience nonetheless reveals these important principles about the interaction of external finance and late industrialisation that have been mostly overlooked in contemporary scholarship, both mainstream and heterodox. In particular, these principles help to clarify why so few developing countries have fundamentally broken through to become “central,” in the sense of endogenising industrial and technological change at the frontier (see Fischer, 2015). Regardless of domestic explanations of success or failure, the challenges of navigating external constraints are potentially overwhelming when relatively stable and affordable external finance is in short supply, or else is not sustained for long enough and throughout global systemic crises. Hence, while the role of external finance has definitely been a troubled affair in the experience of post-war development, with arguably more tragedy than triumph to its count, its role needs to be acknowledged as a means to contextualise domestic productivist strategies within their broader global economic and geopolitical contexts. De-emphasising these principles, on the other hand, arguably does a disservice to our understanding of the contemporary challenges of financing development.

For this purpose, South Korea and Brazil are examined as two contrasting cases engaged in similarly intensive strategies of late development, understood as sustained and relatively successful practices of industrial policy through successive stages of industrialisation. Within this contrast, the emphasis is on the successful case of South Korea, with Brazil serving as a counterexample of much more constrained external financing conditions (the Thirlwall case, so to speak). Ideally, a



larger set of countries would be analysed in order to allow for more generalisable conclusions, although given space constraints and the inductive method adopted, these two cases are sufficient to demonstrate the main points of this article.

The choice of South Korea and Brazil is also pertinent because comparisons of these two countries (and Taiwan) have been so iconic in the political economy of development literature, even though these have mostly focused on industrial policy or developmental states, and have excluded systemic comparative analyses of external finance (e.g., cf. Evans, 1995; Gereffi & Wyman, 1990; Kay, 2002; Kohli, 2004; Schrank, 2007). The seminal works by Cumings (1984) and Amsden (1989) did provide analysis of the external financing conditions supporting the East Asian cases, although their comparisons did not extend beyond the region, whereas systemic analyses of external finance are generally neglected in other seminal works on the East Asian cases, such as by Evans (1995) or Wade (1990). Both cases are also sufficiently similar to their regional counterparts to allow for a degree of generalisability on the broad principles addressed in this paper. For instance, Taiwan exhibited a similar pattern of intensive trade deficits at least up to the mid-1970s, although it came out of these earlier than South Korea and was also a smaller economy. It relied more on FDI than South Korea, although this was carefully regulated, as studied by Wade (1990). It otherwise shared similar principles, although space does not permit to discuss them here.<sup>1</sup> Similarly, while Brazil was the leading industrialiser of the Latin American region throughout the post-war era and was also more domestically oriented, its patterns of external constraints were similar to other industrialising Latin American countries, particularly once push came to shove in the 1982 debt crisis, as discussed further below.

As noted above, the method of the article is inductive, examining the macro-structural trends on the respective external accounts of both countries during the post-war period up until the early 1990s. This time period focuses on the decades leading up to the international debt crisis in the early 1980s, after which South Korea emerged as a leading newly industrialised country whereas Brazil spiralled into deepening crises. Given space limitations, this article does not present in-depth historical or economic analysis of the two cases, which is well established in the literature in any case. The fact that both countries underwent substantial industrialisation and deep structural transformation is also taken for granted. Rather, the approach is positivist, in the sense of refuting false claims by revealing the associations between external imbalances and their compensating sources of finance, rather than attempting to affirm specific patterns of causality within these associations. This is sufficient to demonstrate the macroeconomic interaction between external finance and development in the space provided by an article-length treatment on this issue.

The analysis is made in two sections. The classic insights are discussed in the first while the comparative empirical analysis of the two cases is presented in the second. Some of the broader lessons for the contemporary context are explored in the conclusion.

## 2 | EXTERNAL DEBT AND IMBALANCES IN LATE DEVELOPMENT

A commonly understood corollary from the balance of payments accounting identity is that net flows of external finance are the inverse of current account balances. In this macroeconomic sense,

<sup>1</sup> I would not include Japan in this grouping because it was really a pre-war late industrialiser, the last through the gate before the second world war. See further discussion of this point in Fischer (2015).

the absorption of net financial inflows occurs through trade deficits (including goods and services, and abstracting from income flows on the current account). This allows countries to consume more than they produce for the cost of the finance supplied. Net financial inflows could equally allow for deficits on the income account, such as profit remittances or interest payments on debt, or else other outflows such as reserve accumulation, with the effect of constraining the consumption of imports. As observed by Akyüz (2017), a good example of this latter dynamic is when countries borrow to accumulate reserves.

This logic derived from the accounting identity does not imply a direction of causality between current and financial accounts, unlike theoretical economic models that impose assumptions about causality. A trade deficit could be interpreted from a “real” supply-side perspective, whereby financial flows adapt to and supply the trade deficit. Or, it could be interpreted from a monetary demand-side perspective, whereby the supply of finance determines the ability of a country to run a trade deficit. In either case, a constrained supply of finance limits the ability of countries to run trade deficits.

As argued by Fischer (2016), the absorption of net inflows of external finance via trade deficits operates in symbiosis with late industrialisation, which has a strong propensity to generate trade deficits when unconstrained. This understanding that industrialisation generates or exacerbates foreign exchange constraints was a key point of departure for many of the pioneers of development economics in the 1940s and 1950s.<sup>2</sup> The view was notably informed by inter and post-war experiences of balance of payments instability and crises in Europe, particularly among Central and Eastern European peripheral late industrialisers.<sup>3</sup> The post-war Marshall Plan in turn came to epitomise how such crises could be prevented through marginal but strategic contributions of official external debt. While these were small relative to overall investment needs, they were crucial to overcome the balance of payments consequences of the import intensity of European reconstruction.

The conviction that foreign exchange is a crucial constraint on growth was also theorised from a Keynesian perspective by Thirlwall (1979), with strong structuralist influences from early development economics (e.g., see Thirlwall, 2011). As noted in the introduction, however, Thirlwall has remained sceptical about the role of finance to relieve such constraints given limits to the degree that external creditors would tolerate a country’s level of indebtedness relative to GDP (Thirlwall, 2011, p. 35). He also notes that even large flows of finance make little quantitative difference to the predictions of his family of models, which are dominated by export growth in governing growth performance (Thirlwall, 2011, p. 24). As a result, he essentially maintains his position that a country’s long-run growth is constrained by the “rate consistent with balance of payments equilibrium on current account unless it can finance ever-growing deficits which, in general, it cannot” (Thirlwall, 2011, p. 4). However, most of this theoretical discussion does not refer to the specifics of industrialisation, nor to the fact that the role of external finance can be strategically important even if it is marginal relative to overall investment needs. In other words, small injections of external finance can be crucial in allowing for the growth of manufacturing exports that otherwise statistically dominate measures of growth performance.

Moreover, this position presumes long-run equilibrium (whatever is meant by long-run) whereas, as noted by Kregel (2008), late development has almost always been associated with balance of payments disequilibria and global imbalances. Hence, if we start from empirical induction rather than logical deduction, it is important to ask why late development has tended to generate

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<sup>2</sup>Prominent pioneers following this line of thought include Alfred Hirschman, Arthur Lewis, Gunnar Myrdal, Ragnar Nurkse, Raúl Prebisch, Paul Rosenstein-Rodan and Paul Singer. Chenery and his colleagues subsequently provided a more formal representation with their classic two-gap model. See Fischer (2009) for further discussion.

<sup>3</sup>See Polanyi Levitt (2006) for a discussion of the analyses of this period by both Keynes and Polanyi.

such disequilibria. The fact that growth is constrained by exports, other sources of foreign exchange and the marginal propensity to import is more a description of the symptoms of foreign exchange constraints rather than a causal explanation of how these constraints emerge, and hence how to address them.

The reasons for the inherent tendency of unconstrained late industrialisation (and related development transformations such as urbanisation) to generate trade deficits, especially in the post-war era, are essentially structural. These development processes are typically very import-intensive, and structural and technological dependence results in a strong inelasticity of imports to growth, in particular with respect to capital or technology-intensive and intermediate imports. The inelasticity of such imports implies that the external constraints cannot be overcome through either market clearing prices (the orthodox neoclassical position) or through macroeconomic demand management (the Keynesian position), both of which might even exacerbate the problem. Development is therefore constrained by the supply of foreign exchange to fund trade deficits, in addition to the broader political economy constraints and challenges involved in processes of late industrialisation, as amply discussed in the contemporary literature on industrial policy or developmental states.

The conundrum is that this constraint generated by industrialisation compounds the initial condition of specialisation in primary commodity exports. As seminaly elaborated by Raúl Prebisch and others, this initial condition also results in a tendency for trade gaps and foreign exchange constraints given both declining terms of trade (outside of commodity booms) and lower world income elasticity of demand for these primary exports than for manufactured exports. However, the path to escape this initial condition through industrialisation tends to exacerbate the trade gaps in the short to medium term. Indeed, this conundrum was central to some of the earliest articulations of dependency analysis (e.g., Furtado, 1956), based on the experience of balance of payments crises that had already mired early post-war attempts to industrialise in Latin America. The peripheral and subordinate integration of most poor countries into the post-war world economy was also emphasised in this literature, given that such patterns of integration reinforced technological dependence and siphoned wealth at the expense of import capacity, in particular through the increasing dominance of northern transnational corporations within southern industrialisation.

This understanding is not the same as the neoclassical reasoning for imbalances in terms of the tendency for capital to flow from capital abundant (rich) to capital scarce (poor) countries on the basis of presumed higher returns for capital in the latter, although it is often conflated as such. Rather, the need for foreign exchange is irrespective of returns on capital (however this is conceived). If foreign capital is not forthcoming, the constraint forces austerity and adjustment through quantitative output and income rather than price adjustments precisely because the production structures of these countries are so import dependent, and hence the demand for imports that are essential for output are so inelastic and non-substitutable. The mechanisms of such austerity and adjustment can occur through devaluation, which forces a reduction in imports that are essential for output, or else through increased interest rates, which imposes austerity on the domestic economy, thereby reducing imports indirectly through a reduction in output. With financial liberalisation, interest rates can also serve to attract foreign finance (or to shore up fleeing domestic finance), thereby relieving the constraint through other channels, although still with the effect of imposing austerity on the domestic economy.<sup>4</sup>

The issue is not about export orientation versus import substitution, but about exports keeping up with the financial and capital requirements of industrialisation that, by the very fact of being

<sup>4</sup>See Diaz-Alejandro (1984) on the devaluation route of adjustment in the aftermath of the 1982 Latin American debt crisis. On the interest rate route, see Akyüz (2017), Kaltenbrunner (2015) and Bortz (2016).

late, implies import substitution through one means or another.<sup>5</sup> More pertinently, export-oriented industrialisation itself has relied on a pre-existing capacity to import, as discussed in the next section. In this sense, both import-substitution and export-oriented industrialisation strategies emerged as two, often complementary,<sup>6</sup> post-war responses to a more general conditioning of foreign exchange constraints, in coordination with strategies on the financial account such as encouraging FDI, or accumulating debt or other inward financial flows, as means to finance trade deficits through the financial account. The choice has been generally between trade deficits balanced by some channel of monetary inflow, or else choking growth. Alternatively, if countries ran trade surpluses, up until recently these were usually the result of import austerity, as was the case in the immediate aftermath of the Latin American debt crisis in the early 1980s, discussed later in the case of Brazil.

The option of using trade surpluses rather than deficits to drive rapid industrialisation, through augmented external demand rather than net financial inflows,<sup>7</sup> has been a relatively new phenomenon among developing countries since the East Asian crisis. However, it needs to be interpreted with caution given its relation to the exceptional circumstances of financialisation and the rapid deepening of integration of developing countries into both international production networks and international finance, as discussed by Akyüz (2017). Indeed, the twin surpluses of China that emerged in the noughties seem to be the inspiration for the neo-developmental advocacy of relying on exports rather than foreign finance, although it was never the case that China's export strategy was based on maintaining autonomy from external finance. Rather, as noted by Fischer (2010, 2015), its burgeoning export sector quickly came to be dominated by foreign-invested enterprises and its surpluses arguably need to be understood as a transitory outcome of this process (see a similar argument by Yu, 2013). Before the noughties, the country actually fit the peripheral late industrialisation rule quite well, in the sense that phases of accelerated growth quickly resulted in current account deficits that were in turn corrected through austerity. For the rest of developing countries, even the more recent period of financial exuberance has concealed at best an intensifying structural dependence of economic growth on intermediate and capital-intensive imports, as well as an increasing array of imported consumption items encouraged by trade liberalisation.

This interaction between industrialisation and trade deficits is inadequately theorised in the otherwise insightful contemporary structuralist and Keynesian literatures. Thirlwall does refer to the effect of structures of production on export and import elasticities, in the tradition of Raúl Prebisch (e.g., Thirlwall, 2011). However, this in itself does not suffice to capture the dynamics of post-war development efforts to change these structures through industrialisation, which generally exacerbated external constraints in the process. The Thirlwallian tradition of measuring sectoral import and export elasticities over time similarly captures the effects of industrialisation (e.g., see Cimoli, Porcile, & Rovira, 2010), although more as descriptions rather than as causal explanations of these effects, and without explaining how external constraints were overcome in the process. Indeed, in the structuralist model proposed by Cimoli and Porcile (2014), they postulate that industrial and technological policies increase the relative rate of growth by heightening the income elasticity ratio of southern exports (*vis-à-vis* world demand) and that such structural change in East Asia eased the external constraint on growth. They therefore attribute the lagging of Latin America

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<sup>5</sup>Furtado (1973) clarified that import substitution was as much a *de facto* logical corollary of late industrialisation as it was a specific policy choice. See a similar clarification in Hirschman (1968).

<sup>6</sup>For instance, Amsden (1989, 2007) argues that both strategies were complementary in successfully industrialising countries.

<sup>7</sup>See Kregel (2008) for a discussion of these two approaches.



to the poor application of industrial policies, presuming that their external constraints would have been more lenient had they applied their policies better. This ignores, however, the fact that industrialisation in South Korea did not ease its external constraints, at least not until well past the 1982 debt crisis, as discussed further below.

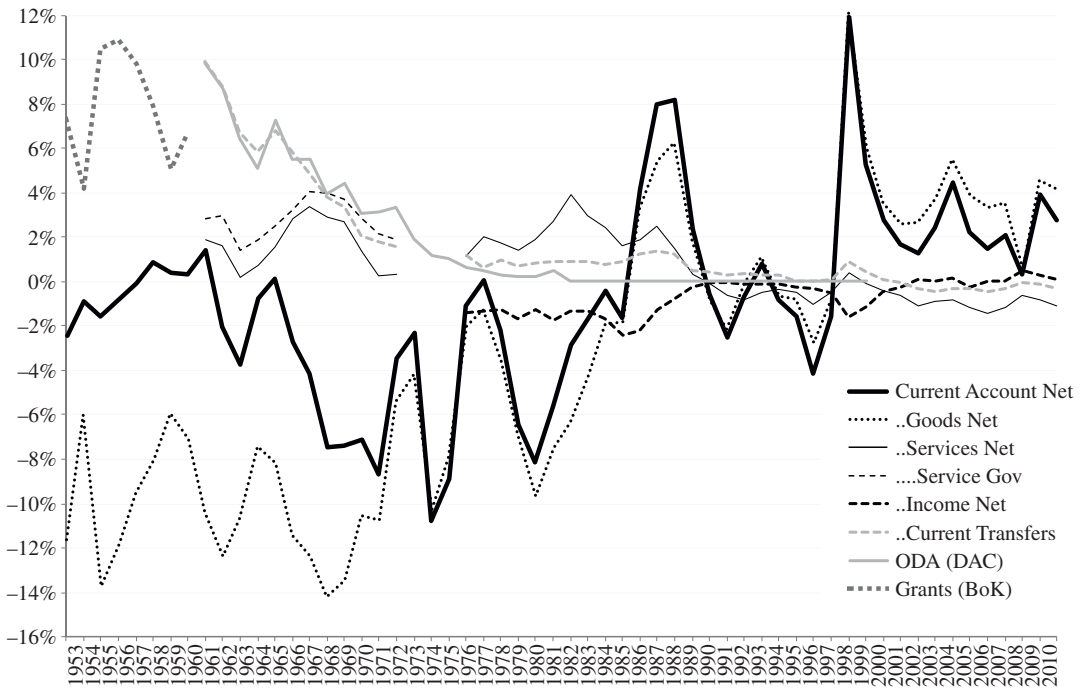
### 3 | COMPARISON OF TWO BALANCE OF PAYMENTS HISTORIES

As discussed in the introduction, the contrasting cases of South Korea and Brazil are sufficient to demonstrate the interaction between external finance and development. For the sake of brevity, the focus of this section is on net balances of the external accounts of these two cases, informed by a general reading of their post-war development experiences. More recent data have been taken from the online IMF balance of payments and international financial statistics databases, although these only provide data from 1976 onwards. Earlier data for South Korea is derived from two sources: from Rhee (1973) for data from 1961 to 1972, supplemented by some historical data published by BoK (1995) for data starting from 1953 onwards, given that this year marked the end of the Korean War. Some gaps and inconsistencies exist between these different Korean data sources, although they are sufficient to trace a broad picture. The case of Brazil was facilitated by access to the database compiled by Giambiagi, Villela, Castro, and Hermann (2011).<sup>8</sup> The balances on the external accounts are also normalised as percentages of nominal GDP converted to US dollars at market exchange rates. The data trends are quite spiky as a result due to effects of successive devaluations. Working against this, however, is the fact that domestic price inflation was generally higher than international price inflation in both countries. Bearing with this spikiness in the interpretation of the historical trends is nonetheless arguably the least bad option for dealing with such data issues.

#### 3.1 | The case of South Korea

South Korea clearly demonstrates the crucial role that debt (and aid) played in financing deep merchandise trade deficits generated by rapid industrialisation, thereby buttressing the economy against associated financial vulnerabilities. As shown in Figure 1, the country consistently ran very deep merchandise (goods) trade deficits from the beginning of the post-war period right up until the mid-1980s. Keeping in mind the accentuated appearance of volatility due to successive devaluations, the merchandise trade deficit was consistently in the range of 8%–12% of GDP from the 1950s until 1971, when it was still at 10.7%. It reached 10.3% in 1974 and 9.7% in 1980. Notably, the deficit fell to its deepest point of 14% of GDP in 1968, in the midst of the country's take-off to an export success story. Indeed, there is no evidence that the purported shift towards an export-oriented strategy in the early 1960s improved these very deep deficits. The choppy improvements to the deficit in the 1970s—counter-intuitively in the midst of the oil price shocks—were achieved through two stabilisation programmes, one in 1971 and another in 1974, although the impacts were short-lived. In effect, both the remarkable take-off of manufacturing exports during the 1960s and the shift into heavier and more capital-intensive industries in the 1970s were arguably import- rather than export-led, as explored further below following the comparison with Brazil.

<sup>8</sup>I am especially grateful to one of the co-authors, Lavinia Barros de Castro, for giving me access to their excel spreadsheets and permission to use the data for this research.



**FIGURE 1** South Korean current account, % of GDP (current values), 1953–2010

*Sources:* Calculated from IMF BoP data for 1976 onwards; Rhee (1973) for 1961–72; and BoK (1995) for 1953–60 and current and goods accounts for 1973–75.

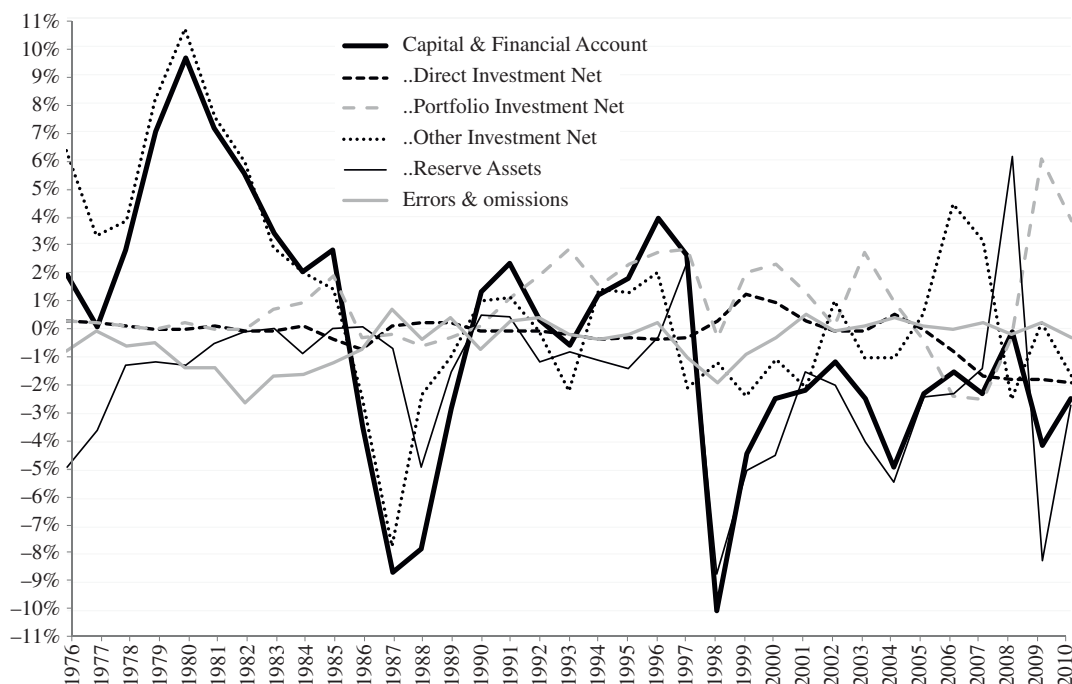
From a comparative perspective, these merchandise trade deficits were far greater than those of Latin American countries up to the eve of the 1982 debt crisis, as discussed below in case of Brazil. From the 1950s until the mid-1960s, they were mostly financed by grants (aid).<sup>9</sup> The services trade surplus also compensated the goods deficit through to the 1980s, unlike most developing economies where services are in deficit (for example, see the case of Brazil below or China in Fischer, 2010). As can be observed in the data from 1961 to 1972, this was entirely due to government services, which mostly represented the servicing of the US military, both in South Korea and in various ventures in South East Asia (Rhee, 1973). Aid and government services obviously highlight the geopolitical importance of South Korea (and Taiwan) for the US (and, by extension, Japan).

The country only achieved a surplus on the merchandise trade account for the first time in 1986. This was due to a deceleration of both export and import growth between 1981 and 1985 precipitated by the international debt crisis and a stabilisation programme implemented during that time.<sup>10</sup> That the economy fell into recession confirms the point that surpluses were generally associated with austerity and adjustment. The huge surge in the merchandise trade surplus from 1986 to 1989 was then associated with efforts to repay the debt that had been accumulated to weather the crisis (shown in Figure 2). The country then returned to a pattern of merchandise trade and current account deficits (albeit more minor), and it was only after the East Asian crisis of 1997–98 that surpluses became a regular feature of the economy.

<sup>9</sup>The tapering off of aid is indicated by the current transfers account, in which grant aid is reported. The current transfers balance corresponds very closely with the OECD DAC data on ODA for most of the 1960s.

<sup>10</sup>See Amsden (1989) for a discussion of these stabilisation programmes.





**FIGURE 2** Financial account, % of GDP, South Korea, 1976–2010

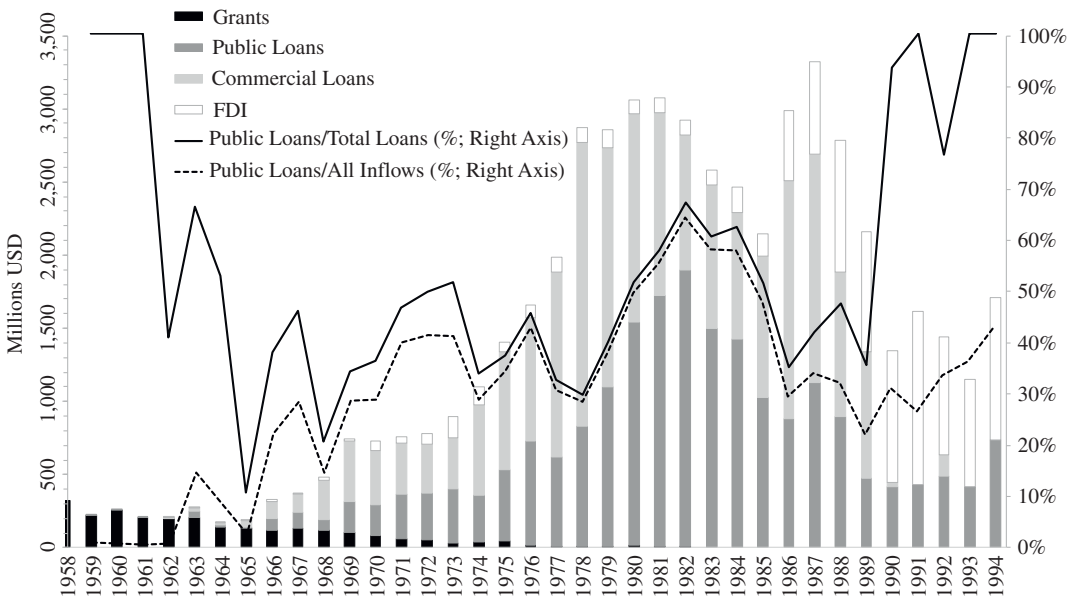
Source: Calculated from IMF BoP and IFS data.

The financial account data provide a fuller picture of the generous financial circumstances that were supporting the South Korean experience, particularly as the economy became more vulnerable in the 1970s. These are shown in Figure 2, based on IMF data from 1976 onwards (according to BMP5 reporting standards). The financial account data in Rhee (1973) are not consistent with the more recent IMF reporting and hence are not shown.

Two main insights can be derived from these data, one on the important role of debt and another on the insignificance of FDI up to the 1980s. As aid tapered off from the mid-1960s onwards, it was replaced by debt as the main means of financing trade deficits (Rhee, 1973). This trend can be seen in the large surge in “other” investment (i.e., bank loans) in the second half of the 1970s, besides in 1977 when the current account was briefly balanced. As discussed by Amsden (1989), external borrowing was an explicit government strategy to finance current account deficits and it was facilitated by relatively closed financial accounts and the fact that the high levels of investment of this period were driven by public sector enterprises. This state mediation explains the very close correspondence between other investment and the overall financial account.

The standard story is that South Korea’s debt was largely official and thus more stable than the debt typically issued to Latin American countries, although some qualification is required. Figure 3 presents data from BoK (1995), which decomposes annual foreign capital inflows into grants, public and commercial loans, and FDI. Accordingly, debt was initially dominated by official (public) flows,<sup>11</sup> but as early as 1966, when nominal debt started to increase rapidly, the bulk was in fact

<sup>11</sup>Rhee (1973) notes that debt was at first dominated by long-term concessional loans from the US and then increasingly Japan, but then the structure of debt became increasingly composed of private short-term loans in the 1970s.



**FIGURE 3** Structure of foreign capital inflows, Republic of Korea, 1958–94

Source: Calculated from BoK (1995, p. 756).

commercial. The share of official debt ranged roughly between 30% and 50% of total external debt in the 1970s. Frieden (1981) similarly reported that 45% of South Korea's total public external debt in 1978 was official (although his data do not correspond to BoK, 1995). This was higher than the shares of Mexico in the same year (20%) or Brazil (31%), although the difference is not sufficient to explain the dramatically different experiences in the subsequent debt crisis. Indeed, relative to GDP, the public external debt load of South Korea in 1978 was more than double that of Brazil or Mexico (according to the data provided by Frieden).<sup>12</sup>

Rather, what distinguishes the South Korean case is that the amount and share of official/public external loans surged in the lead up to the 1982 debt crisis. The surge also appears to have sustained the amount of private external lending, in contrast to the collapse in private lending that precipitated the crisis in Latin America. As shown in Figure 3, nominal public lending doubled between 1978 and 1982. It reached 67% of total lending in 1982 or 65% of total capital inflows, and by 1985, it remained at 52% and 48%, respectively. The effects of this are also reflected in the (net) other investment account shown in Figure 2, which was in surplus by 5.9% of GDP in 1982 and remained positive until 1985.

Official lending not only staved off illiquidity crisis but also tempered the impact of sharply rising US interest rates from the late 1970s onwards given the less flexible interest rates on the longer-term official loans. This is reflected in Figure 1 by the fact that the deficit on the income account only briefly fell slightly below 2% of GDP in 1985 and 1986, in contrast to the crushing income account deficit in Brazil, which reached 6.1% of GDP by 1984. For South Korea, this was particularly important in the light of its very deep merchandise trade deficits, which remained at

<sup>12</sup>This obviously underestimates the overall indebtedness of the Latin American economies given that much of their external debt was contracted by the private sector and was subsequently socialised only once the debt crisis ensued (e.g., see Diaz-Alejandro, 1984). Nonetheless, these ratios are significant insofar as the 1982 debt crisis was initially sparked by sovereign illiquidity (or insolvency) problems.



6.3% of GDP in 1982, as well as the substantial degree of capital flight, reflected by the deficit on the errors and omissions of 2.6% of GDP in 1982 (it again reached 1.9% of GDP in 1998).<sup>13</sup> In other words, both the supply and the structure of external debt reflect the preferential conditions accorded to South Korea and clearly played a crucial role in bolstering the country's resilience to financial crisis throughout these years.

Following the current account surplus surge from 1986–89, which was associated with debt repayment, the tight correspondence between debt, the overall financial account balance and the current account subsequently broke down. The rupture was first marked by a brief spell of reserve accumulation and then by the increasing prominence of portfolio and other financial flows in the 1990s. It was only after the East Asian crisis that reserve accumulation became the main determinant of the financial account (along with surpluses on the current account, as noted above).

The second important insight from Figure 2 is that net FDI remained very marginal up to the 1990s. Based on data from Rhee (1973; not shown in Figure 2) and BoK (1995; see Figure 3), net FDI was almost non-existent prior to 1966. Thereafter, it remained well below 0.5% of GDP up to the 1990s, besides in a few exceptional years (e.g., it reached 0.6% in 1971) and it was often slightly negative in the 1980s. These net flows more or less represent the gross flows of FDI into South Korea up to that time given that there were effectively no outflows of direct investment abroad prior to the 1980s. This confirms the observation seminally made by Amsden (1989, pp. 20–21) that South Korean industrialisation occurred almost exclusively on the basis of national ownership and that the industrial strategy relied on “massive imports of foreign licences and assistance” financed through external debt as a means to attain technological independence and to avoid foreign control. Notably, such modes of technology acquisition are reflected by the deficit on the private services account rather than as FDI on the financial account.

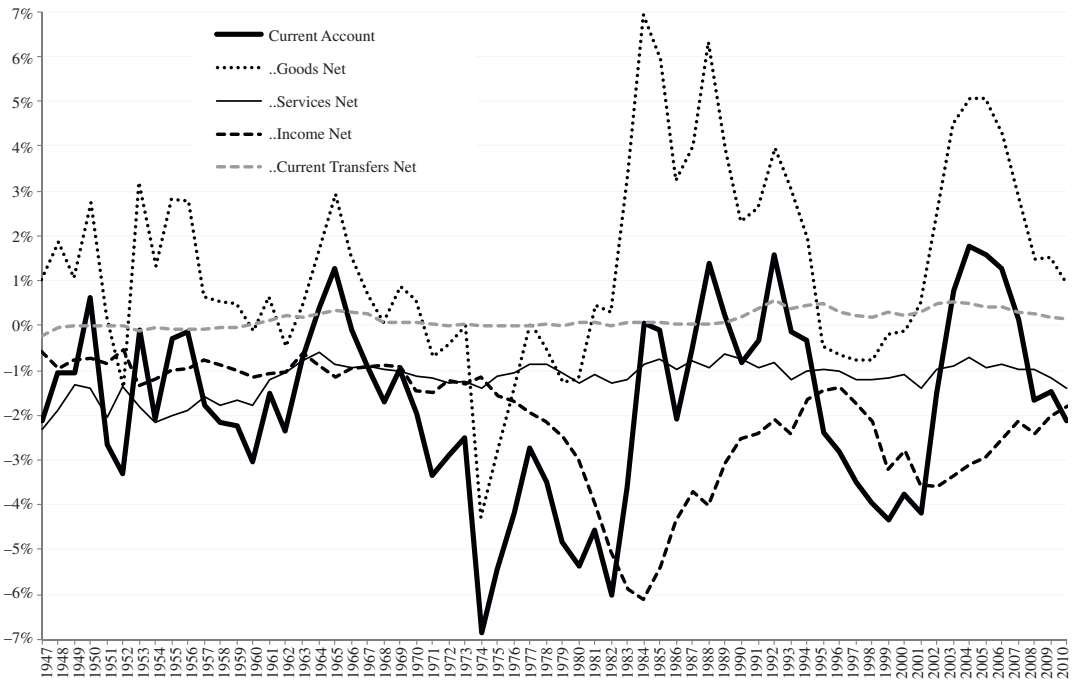
In sum, the external accounts of South Korea reveal several attributes that do not necessarily explain the industrial success of country, but that definitely highlight how certain decisive constraints on this industrial success were relaxed over several decades of intense and vulnerable transformation. One is an exceptional ability to run merchandise trade deficits. Second is that these were financed through aid and then through debt, the bulk of which was official during a key moment of global systemic crisis in the early 1980s. Lastly, all of this was performed without reliance on FDI.

### 3.2 | The case of Brazil

The contrasting case of Brazil clearly demonstrates the constraints faced by late-industrialising countries in the absence of ample supplies of stable and affordable finance. Brazil's only exception to this rule was during the 1970s, when the country did face generous financial conditions and its external accounts manifested patterns similar to South Korea, although these were forcefully reversed following the 1982 debt crisis. Otherwise, as shown in Figure 4, the structure of Brazil's external accounts consistently exhibited a classic peripheral pattern of merchandise trade surpluses and private financial inflows financing overall current account deficits due to large deficits on the services and income accounts. In this sense, its current account deficits were fundamentally different from those of South Korea in that they were not driven by merchandise trade deficits, a pattern that it continued to exhibit in 2010.

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<sup>13</sup>I have not been able to find any empirical evidence to support the common narrative that South Korea was also more successful than Latin America due to a stronger social control over capital flight through an appeal to patriotism. Rather, these errors and omission data suggest a substantial amount of capital flight.



**FIGURE 4** Brazil current account, % of GDP (current values), 1947–2010

Source: Calculated from data appendices in Giambiagi et al. (2011).

It is also evident in Figure 4 that the current accounts of Brazil were much more constrained than those of South Korea. When the country was able to run sustained merchandise trade deficits from 1971 to 1980 (and then very mildly from 1995 to 2000), they only ever exceeded 1% of GDP on a few occasions (in 1952, 1974–76 and 1979–80), and more than 2% only in 1974–75 (e.g., the merchandise trade deficit briefly reached 4.3% of GDP in 1974). Indeed, Brazil was already running a small goods surplus in 1981, the year before the debt crisis, due to an austerity programme that was aimed at keeping the IMF at bay (see Diaz-Alejandro, 1983). Moreover, when they occurred, the merchandise trade deficits were only minor contributors to the overall current account deficits (besides in 1974), given the chronic deficits on the services and income accounts.

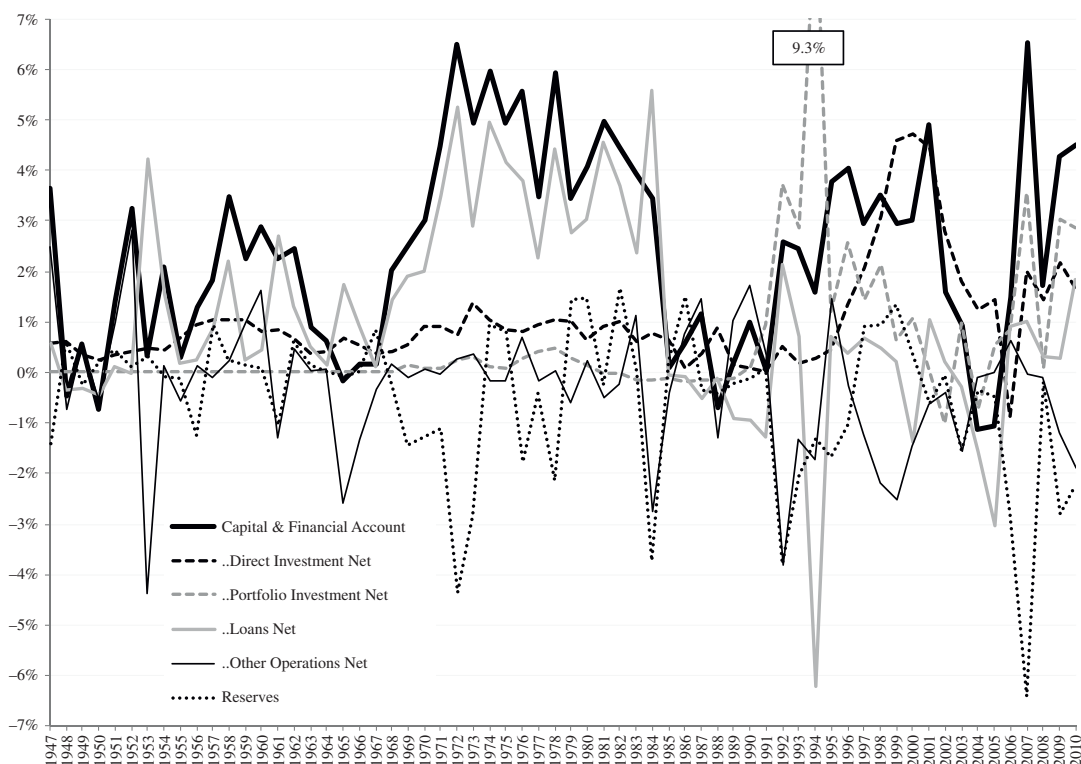
The oil shocks are usually suggested as an explanation for the merchandise trade deficits in the 1970s. However, the increase in oil and related imports actually only accounted for a minor share of the overall increase in merchandise imports between 1972 and 1974, whereas capital and intermediate goods still accounted for almost three quarters of merchandise imports in 1974, when the merchandise trade account fell to its deepest-ever deficit (see data in Giambiagi et al., 2011, p. 254). While oil imports became more important later in the decade, reaching half of all merchandise imports by 1981, the more significant explanation for the deficits (and for increased oil consumption) was the strong move into heavier and more technologically complex industries from the late 1960s onwards (see Castro & Pires de Souza, 1985; Furtado, 1973). The industrial strategy and reliance on external debt were similar to that of South Korea, although unlike South Korea, import capacity in Brazil was eroded rather than enhanced by the services deficit.

Import capacity was also eroded much more severely by the income account deficit from the mid-1970s onwards, reflecting the greater reliance on short-term commercial external debt. Indeed,

the income account deficit of Brazil had become a far more powerful factor driving the current account deficits by the later 1970s than oil imports and reached over 6% of GDP by 1984. As a result, the overall current account of Brazil remained deep in deficit despite the small goods surplus in 1981–82 and it reached 6% of GDP in 1982, due to a rapidly worsening deficit on the income account that was increasingly dominated by interest payments.

Meanwhile, the economy was quickly adjusted to generate very large merchandise trade surpluses, which reached almost 7% of GDP in 1984. However, these surpluses merely compensated for the income and service account deficits, in contrast to the surpluses of South Korea in 1986–89, which were associated with paying down debt. Brazil nonetheless managed to balance the current account in 1984. As seminally discussed by Diaz-Alejandro (1984), this was achieved through austerity and a sharp reduction in imports rather than by increasing exports. Imports fell from a peak of US\$23 billion in 1980 to a trough of US\$13 billion in 1985, whereas exports were roughly stagnant until the later 1980s. Notably, the import of capital goods was more than halved from 1980 to 1984 and the import of intermediate goods almost halved (see data in Giambiagi et al., 2011, pp. 253–254). Indeed, the capacity to increase manufacturing exports—beyond the vagaries of terms of trade—would have been severely constrained by this investment and import austerity imposed by stabilisation programmes. In contrast and as discussed above, imports in South Korea stagnated but did not collapse over these years. The turbocharge into generating trade surpluses was also delayed until later in the decade, under more advantageous external circumstances, and was achieved with an almost doubling of imports, rather than an almost halving of imports as in the case of Brazil.

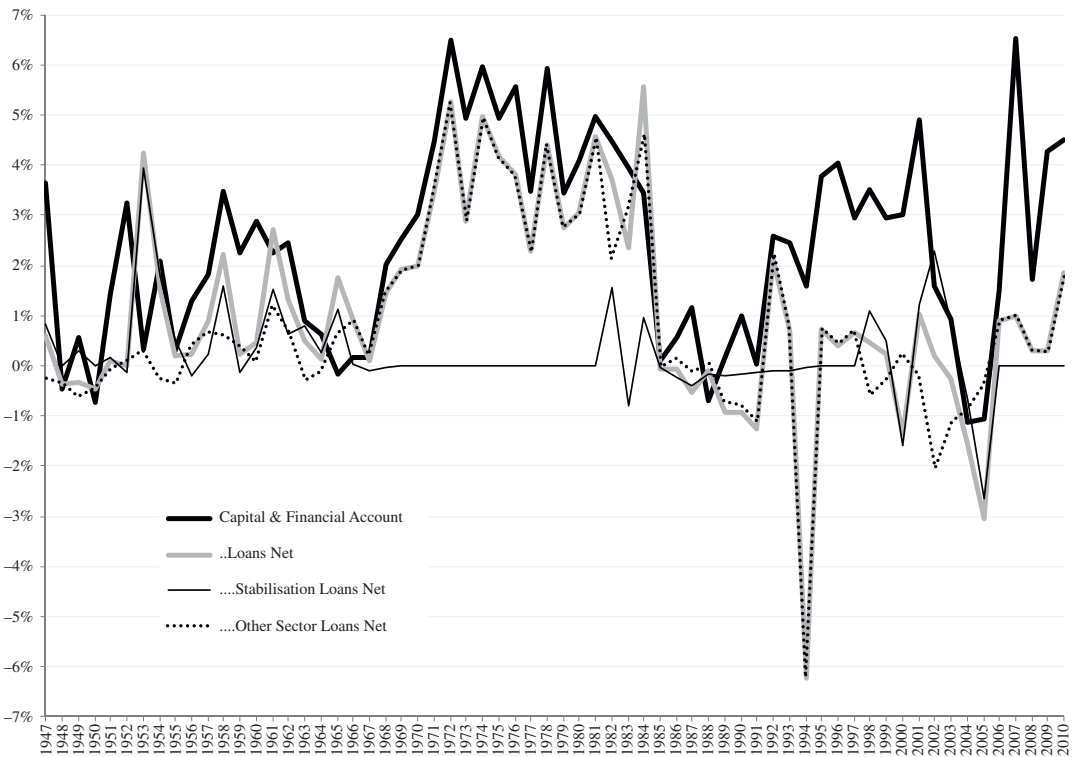
On the financial side, the regular and sustained source of foreign financing throughout the entire period came from net FDI, as shown in Figure 5. However, despite the emphasis that FDI



**FIGURE 5** Financial account, % of GDP, Brazil, 1947–2010

received in the earlier dependency literature, net FDI rarely exceeded 1% of GDP until the exceptional surge in the late 1990s. Nonetheless, these levels of FDI were sufficient to establish the dominance of foreign corporations in key strategic industrial sectors, such as the automobile industry where foreign-owned firms accounted for 92% of sales by 1995 (Chudnovsky & López, 1997; cited in Baumann, 1998, p. 11).

Another point worth noting on the financial account was the limited role of commercial borrowing up until 1968, as shown in Figure 6. This reflects the very constrained external private financing options generally available to developing countries in the early post-war period, before the explosion of international lending from the late 1960s onwards. Prior to 1968, the financial account of Brazil was largely determined by volatile movements of “other operations” on the “other investment” account (as per the terms used by Giambiagi et al., 2011; see Figure 5),<sup>14</sup> and by stabilisation loans (i.e., from multilateral institutions such as the IMF; see Figure 6). The former was the primary determinant of financial instability up to the mid-1960s and appears to have been constituted by commercial arrears.<sup>15</sup> This probably reflects the adjustment mechanisms of the free-trade regime with fixed exchange rates that was adopted in the immediate post-war period, which ended in the balance of payments crisis of 1953. The stabilisation loans correspond to the succession of balance of payments crises in 1953, 1958, 1961 and 1965, after which Brazil was able to avoid recourse to such emergency financing until 1982, when stabilisation loans briefly amounted to 1.5% of GDP in that year. While the post-crisis experiences with debt and other forms of



**FIGURE 6** Net external loans (from the financial account), % of GDP, Brazil, 1947–2010

<sup>14</sup>Giambiagi et al. (2011) disaggregated the “other investment” category into “loans” and “other operations.”

<sup>15</sup>I am indebted to Lavinia Barros de Castro, one of co-authors of Giambiagi et al. (2011), for this insight.



finance have been amply explored by others (e.g., see Kaltenbrunner & Paineira, 2015, 2017), the relatively limited role of net loans in this more recent period is notable, in comparison with other forms of financial inflows such as direct and portfolio investment.

In sum, despite radical transformations of the Brazilian economy over these decades, the lack of transformation in the structure of the external accounts is suggestive of certain fundamental structural predicaments that had not been overcome and, in certain respects, might have even intensified (such as the presence of foreign ownership). This was arguably crucial in curtailing its industrialisation efforts.

### 3.3 | Gross trade flows compared

A final comparative reflection regards the degree to which capacity to increase imports preceded capacity to increase exports. This is examined in Figure 7 through the weight of gross merchandise trade flows relative to the domestic economy of both cases (up to 1994). As has been well recognised, South Korea ended this period with a much stronger weight of exports in its economy than Brazil. This differentiation started to become apparent in the late 1960s. The remarkable rise of gross exports to GDP that started in 1960 in South Korea contrasted with the gradual albeit punctuated decline in the same ratio of Brazil from the late 1940s up to the late 1960s (albeit from a higher starting point).

It is notable, however, that the export surge in South Korea was preceded by an even greater surge of imports, particularly in the 1960s when the lag was around 5 years. It is only after the mid-1980s that the South Korean economy reflected what might be called an export-driven

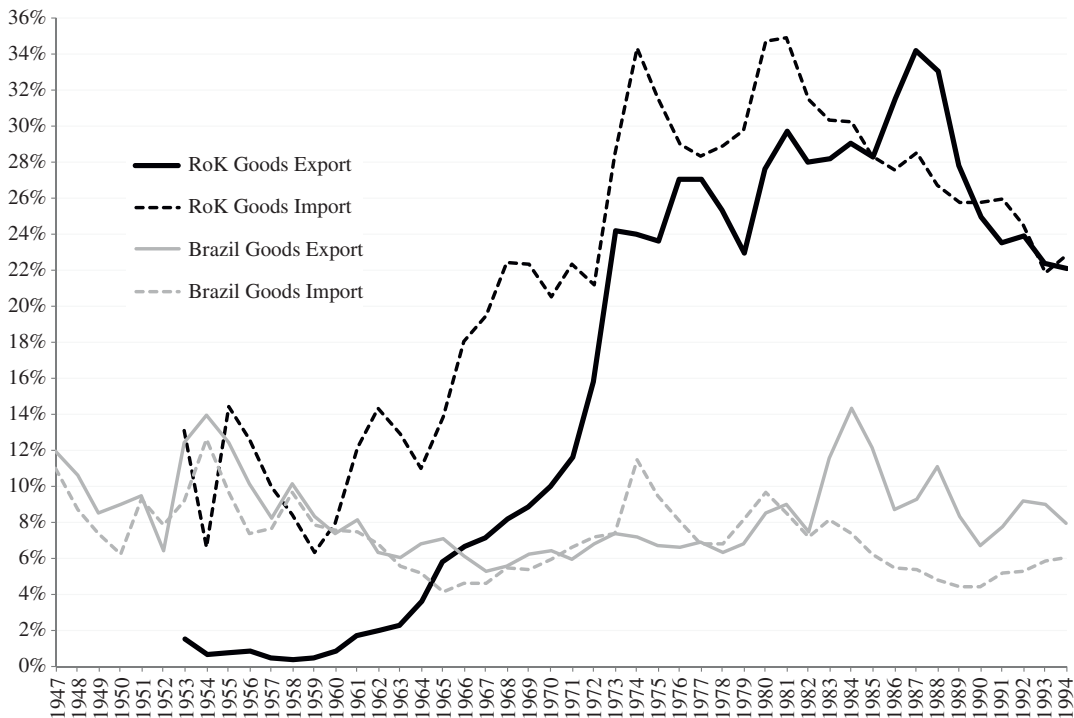


FIGURE 7 Gross merchandise trade, Brazil and South Korea, % of GDP, 1947–94

Source: Same as previous figures.

economy, in the sense of exports leading the consumption of imports or at least increasing in synchronicity with them, rather than the financing of imports leading the capacity to export. The contrast with Brazil is suggestive of the argument that the constrained capacity to import impeded the ability of Brazil to develop its manufacturing exports further or faster than it did during this period, whereas South Korea had much more latitude in this regard. At the very least, these structural distinctions need to be taken into consideration in comparative assessments of the two economies, rather than relying on purely domestic political economy considerations to explain differences in performance.

## 4 | CONCLUSION

The contrasting balance of payments histories of South Korea and Brazil highlight certain fundamental principles about the role of external finance in relaxing the external constraints of economic development, understood as centrally involving industrialisation. This role operates through the channel of trade deficits insofar as such deficits are both necessary for the absorption of net external finance and have been a structural tendency of post-war late industrialisation, at least up until the end of the twentieth century.

In the more successful case of South Korea, ample supplies of debt, both official and commercial, and grant aid up to the mid-1960s, allowed the country to run deep merchandise trade deficits up until the mid-1980s, ironically despite the reputation of the country as an export-oriented poster child. The country did perform impressively in terms of increasing exports, but it was guzzling imports as intensively and, in this sense, it had not solved the predicament faced by Latin Americans of an increasing import intensity associated with industrial policies, particularly as these shifted towards more capital-intensive industries. Rather, its capacity to increase exports was arguably permitted by its preceding ability to increase imports. This was crucially funded by external debt from the mid-1960s onwards, as aid was tapering off while second-stage industrialisation strategies were being ramped up. Such debt also permitted South Korea's emergence to occur without reliance on FDI and, hence, through mostly national forms of ownership (the case of Taiwan is somewhat different in this respect, although other aspects are similar). Even as commercial lending came to play a more prominent role in the 1970s, the surge in official lending in the years preceding and following the 1982 international debt crisis appears to have been crucial to maintaining the solvency of the country in the midst of its deep trade deficits that persisted through these years, which under normal circumstances would have given financial markets cause for concern.

In contrast, Brazil's development strategies quickly become constrained by the inability to run sustained trade deficits due to much more constrained external financing conditions. The strains resulted in the succession of balance of payments crises in the 1950s and early 1960s, which were resolved through austerity and stagnation, and the limited supplies of external borrowing prior to 1968 were mostly in the form of official lending associated with these monetarist stabilisation programmes overseen by the IMF. Indeed, the punctuated attempts to run trade surpluses from the first crisis onwards were, until recently, the result of the austerity and stabilisation programmes. However, once these contractionary pressures on the economy were relaxed and industrialisation strategies reinvigorated, the external constraints invariably re-imposed themselves, at least until they were relaxed by the explosion of international lending from the late 1960s onwards, which allowed Brazil to run sustained merchandise trade deficits for the first time in the post-war period. The economy nonetheless reverted to similar dynamics following the 1982 debt crisis, when borrowing became much scarcer and dearer. Meanwhile, the regular inflows of FDI led to foreign



dominance in the strategic lead industries of the country and also entrenched the structural pattern of deficits on the services and income accounts.

These contrasting examples highlight, in particular, the classic insight from early development economists that late industrialisation tends to exacerbate rather than relieve pre-existing external constraints in at least the short to medium term, even in the context of export-oriented industrialisation. They also highlight that the developmental principles of external finance must be assessed relative to such structural processes, as a strategic marginal contribution to allow for the operation of late industrialisation strategies unconstrained by their tendency to run trade deficits. External debt in particular allows countries to practise these strategies without reliance on FDI. As famously asserted by Lewis (1978), debt preserves sovereignty (so long as it can be managed), whereas FDI effectively denationalises industrialisation.

These insights receive little if any attention from the mainstream literature on development finance given the reticence within this literature to acknowledge the centrality of state-led industrial policy within economic development. However, they also face resistance and rejection in the neo-developmental and post-keynesian literatures dealing with these issues. As discussed in the Introduction, one reason is scepticism about the possibility of external creditors being willing to finance trade deficits for any sustained length of time, or even about the benefits of this given the dangers of dependency, whether gradually through FDI or dramatically through crisis. Perhaps as a result, there has been a tendency to overemphasise a domestic productionist reading of the East Asian development experience.

The problem, however, is that in the few cases of successful late industrialisation in the post-war era, very deep trade deficits were sustained by external finance for a long time. Indeed, the purported shift in South Korea to an export-oriented industrialisation strategy from 1960 onwards did not subdue these deficits. External debt was as significant if not more than in the Latin American cases. Besides very large amounts of aid up to the mid-1960s, a key difference was not the reliance on debt, nor even necessarily the official versus commercial composition of debt in the 1970s, but the fact that the official surged before, during and after the systemic crisis of the early 1980s. This speaks much to the geopolitical context, although it does not refute the principle that post-war late development engenders an intensive demand for external finance, which has to be met if development strategies are not to be stymied, no matter how wisely and effectively domestic strategies are conceived and implemented.

A more general point that emerges from this analysis concerns the ways that external constraints interact with domestic factors (to the extent that the domestic can be analytically insulated from the external). The political economy of industrialisation in particular is conditioned by the ways that states and the economies that they regulate respond to the constraints and opportunities in accessing foreign exchange, given their particular historical and geopolitical positioning within the global system. From this perspective, a series of more fundamental questions regarding the structure versus agency of industrialisation strategies needs to be asked. One is whether the external constraints of Latin America would have allowed a better application of policies in any case. Or, to what extent were policymakers complicit in reproducing these constraints, rather than being victim to their structural circumstances. Or even, to what extent are explanations of better or worse policy application somewhat tautological in their identification of the outcomes of externally-constrained industrialisation as causes to explain these outcomes.

The importance of emphasising these interpretative lenses, both past and present, is to avoid setting a trap of false expectations for those seeking to emulate the past in the present context. Indeed, official lending by international financial institutions is very limited in supply relative to contemporary needs, such as for infrastructure and other investment needs, particularly if these

needs are informed by the role that aid and official lending played in the South Korean case. It also comes heavily laden with conditionalities that undermine the types of policies that allowed South Korea to leverage its external indebtedness for effective industrialisation. More pertinently to the theme of this paper, sustained deep trade deficits, generated for the purposes of supporting state-led industrial policy, are discouraged by such public creditors and penalised by private financial markets. In this sense, there is an inimical dynamic between the external financial needs of development and the external private financing of development, which is perhaps shrouded during boom times, but that becomes explicitly punitive when times turn dire.

An even greater systemic dilemma in the current setting of global imbalances is that these have been led by US trade deficits since the early 1980s. Before this, imbalances were conditioned by US trade surpluses and hence net financial outflows from the US to the rest of the world, which was conducive for both classical developmentalism and dependency. However, the current setting has been profoundly unconducive for supporting net financial transfers from rich to poor countries given that these imbalances encourage the inverse (especially net flows to the US). This helps to explain the relatively new tendency for developing countries to run trade surpluses rather than deficits, although as noted in the first section, we must be cautious in how we interpret such tendencies, even in the most obvious case of China. In any case, the setting works against developing countries running trade deficits, which is no doubt exacerbated by financial speculation across increasingly open and integrated financial systems. The fundamental long-term challenge facing the external financing of development concerns the question of how to reverse the pattern of these global imbalances in such a manner that they privilege net flows to poorer countries, albeit preferably not in a manner that reinforces dependency.

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