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Who Captures Export Windfalls? Exchange Rates, Export Profitability, and National Saving under Dominant-Currency Pricing

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Who Captures Export Windfalls? Exchange Rates, Export Profitability, and National Saving under Dominant-Currency Pricing

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ABSTRACT: Under dominant-currency pricing—where many export prices are set in dollars—the real exchange rate allocates export windfalls between producers and consumers. When the real exchange rate is stable, rising dollar export revenues pass through nearly one-for-one into higher real local-currency export income, profits, and retained earnings; when it appreciates, part of the windfall accrues to consumers through cheaper imports, compressing exporters' margins. National saving should therefore respond to real local-currency export income—the portion accruing to domestic producers—rather than to dollar receipts per se. Using five-year panels for 42 economies over 1982–2022, we find that the national saving rate rises by about 0.27 percentage points for each 1 percentage point of GDP increase in real local-currency export income, while dollar export income has no independent effect once the local-currency measure is included. Peru versus Brazil during the commodity boom, China's post-WTO export surge, and Argentina's 2002 devaluation validate the mechanism and its timing. A coefficient estimated from 41 countries predicts China's 9.7-percentage-point saving increase (2002–2007) with an error of just 0.1 point. These findings reinterpret the "global saving glut" as the aggregate outcome of export booms whose windfalls accrued disproportionately to high-saving producers when real exchange rates remained stable.

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Keywords:	Dominant-currency pricing; real exchange rates; export profitability; national saving; global saving glut; export booms; structural transformation
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Prepared by Bas B. Bakker[1]

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Contents

1 Introduction

Export booms generate sharply different macroeconomic outcomes. In some cases, they coincide with sustained investment, rising tradable capacity, and structural transformation; in others, they mainly finance temporary consumption increases that reverse when external conditions deteriorate. The 2000s provide a vivid contrast. Peru and Brazil both benefited from the commodity boom, yet Peru experienced a more gradual real appreciation alongside high saving and investment, while Brazil saw a sharper appreciation and a stronger consumption response. China's post-WTO export surge was accompanied by an unprecedented ten-percentage-point rise in the national saving rate within five years; after 2007, real appreciation coincided with compressed margins and a decline in saving.

A related puzzle runs through the terms-of-trade literature. Standard intertemporal models predict that favorable terms-of-trade shocks should raise saving, but empirically the saving response to windfalls is unstable across countries and episodes. This paper argues that the apparent instability reflects heterogeneity in the domestic distribution of the windfall, which depends on exchange-rate behavior.

The core mechanism is simple. Under dominant-currency pricing—where export prices are set in dollars—exchange-rate movements have limited short-run effects on export volumes but large effects on exporters' domestic-currency margins. When the real exchange rate is stable, rising dollar export receipts pass through largely one-for-one into higher real local-currency export income, profitability, and retained earnings. When the real exchange rate appreciates, part of the windfall accrues instead to domestic consumers through cheaper imports, compressing exporters' margins and weakening the saving response. In this sense, the real exchange rate acts as a distribution mechanism that determines who captures export windfalls—producers versus consumers—and, through different saving propensities, how national saving responds.

This distributional perspective yields a sharp empirical implication that guides the analysis: national saving should respond to real local-currency export income—the component of export receipts that translates into domestic purchasing power for producers—rather than to real dollar export income per se. The paper evaluates this implication using five-year panels for 42 economies over 1982–2022, complemented by diagnostic country episodes where export windfalls and real exchange-rate movements decouple in informative ways (China's post-WTO surge, Argentina's 2002 devaluation, and Peru versus Brazil during the commodity boom).

Contribution

The paper contributes in three ways. First, it develops a profitability channel linking exchange rates to national saving under dominant-currency pricing: by reallocating export windfalls between producer margins and consumer purchasing power, exchange-rate movements govern how strongly export booms translate into profitability, saving, and investment.

Second, it provides cross-country evidence and a diagnostic test of the mechanism. Across the sample, a one-percentage-point rise in local-currency export income (as a share of GDP) is associated with an increase in the saving rate of about 0.27 percentage points, while dollar export income has no statistically significant independent effect once the local-currency measure is included. Natural experiments and comparative episodes—especially Argentina 2002 and Peru versus Brazil—corroborate both the mechanism and its timing.

Third, it shows that the export-saving link varies systematically with policy regimes and macro configurations. Under dominant-currency pricing, episodes with relatively stable real exchange rates and fiscal restraint exhibit stronger pass-through from export booms to domestic profitability and saving; appreciations and fiscal expansions are associated with windfalls being absorbed in consumption or public spending.

Related literature and unifying framework

The framework unifies three literatures that have largely evolved in parallel. It extends the dominant-currency pricing paradigm from short-run nominal rigidity to a medium-run framework centered on profitability and accumulation; it reinterprets Dutch-disease arguments as operating through tradable profitability under dominant-currency pricing rather than primarily through factor reallocation; and it offers a macroeconomic mechanism linking East Asia–Latin America divergence in development outcomes to differences in how exchange-rate behavior shapes local-currency export income. The unifying insight is that, under dollar pricing, exchange-rate movements determine whether export booms translate into producer profits and saving or consumer income and consumption.

Interpretation and scope

The analysis is positive rather than prescriptive. While the mechanism implies that real appreciation during export booms can compress tradable margins and weaken the saving response under dominant-currency pricing, it does

not follow that resisting appreciation is generally optimal, particularly when appreciation reflects fundamentals such as sustained terms-of-trade gains. In practice, leaning against appreciation involves monetary and financial tradeoffs—especially under high capital mobility—and the desirability of any exchange-rate response is country- and state-contingent.

The remainder of the paper proceeds as follows. Section 2 reviews related literature; Section 3 develops the conceptual framework; Section 4 presents comparative case evidence from China, Peru, and Brazil; Section 5 reports cross-country panel results; Section 6 provides validation using out-of-sample prediction and natural-experiment evidence; Section 7 discusses implications for global imbalances and structural transformation; and Section 8 concludes.

2 Literature Review

This paper relates to three strands of literature: research on dominant currency pricing (DCP), debates on real exchange rates and Dutch disease, and comparative accounts of export-led growth.

2.1 Dominant currency pricing

The DCP literature has fundamentally reshaped how economists think about exchange rates and trade elasticities. Gopinath et al. (2010) showed that when trade is invoiced in dollars, exchange rate movements do not translate into symmetric changes in export and import prices, limiting expenditure switching. Goldberg and Tille (2008) and Gopinath and Stein (2018) emphasized that sticky dollar pricing weakens traditional trade elasticities and alters monetary policy transmission. The "Dominant Currency Paradigm" of Gopinath et al. (2020) formalized these insights, stressing that under dollar invoicing, demand-side responses to exchange rate movements are muted.

While these studies provide the foundation, they primarily focus on *short-run demand effects*. Gopinath (2015) and Gopinath et al. (2020) acknowledge that exchange rate changes alter exporters' local-currency profitability, with possible implications for production and investment, but this channel is not developed into a medium-term framework. Firm-level studies such as Berman et al. (2012) and Amiti et al. (2014) show that depreciations raise markups and affect exporters' margins, but again these are short-run adjustments.

More recently, empirical work has begun to explore supply-side effects under DCP. Frohm (2021) provides evidence that exchange rate movements affect export volumes via an extensive-margin channel, even when demand-side pass-through is limited. Other contributions (e.g., Koike and Mori,

2025) develop theoretical models in which profitability dynamics under DCP influence productivity and resource allocation in the long run. These studies suggest that supply-side responses may be quantitatively significant.

Earlier firm-level studies established that exchange-rate movements affect exporters' markups and profits through incomplete pass-through and pricing-to-market behavior (Berman et al., 2012, Amiti et al., 2014). These studies, typically focused on individual economies, showed that under foreign-currency pricing, depreciations raise exporters' local-currency revenues and markups even when quantities change little.

More recently, cross-country evidence from the Bank for International Settlements extends this result to a global setting. Using a new measure of firms' invoice-currency exposure (NICER), the BIS study confirms that depreciations systematically raise exporters' profits under dominant-currency pricing (Nookhwun et al., 2025). Whereas earlier work identified the mechanism within countries, the BIS results demonstrate its pervasiveness across economies and currencies, providing broad empirical validation of the profitability channel emphasized here.

This paper generalizes the dominant-currency paradigm of Gopinath et al. (2020) by extending it from short-run price stickiness and muted expenditure switching to medium-term supply-side dynamics. Under dollar invoicing, exchange-rate movements not only alter relative prices temporarily but also have persistent effects on exporters' local-currency profitability, retained earnings, and capital accumulation. In this sense, the paper introduces a new *supply-side transmission channel* under DCP: real depreciations raise profit margins and investment in tradables, while appreciations compress margins and slow capacity growth. This mechanism transforms the traditional DCP framework from one describing cyclical price rigidity into one explaining structural differences in saving, investment, and growth.

By making this profitability channel central, the paper links the short-run mechanisms of Gopinath et al. (2020) to the growth framework of Rodrik (2008), showing that exchange-rate movements can drive structural transformation through profitability rather than relative prices.

2.2 Real exchange rates, Dutch disease, and overvaluation

A second body of research links exchange rates to the performance of tradables through Dutch disease and overvaluation mechanisms (Corden and Neary, 1982, Krugman, 1987, Rodrik, 2008). In these models, appreciations reduce tradable-sector competitiveness by reallocating resources toward nontradables, thereby slowing growth. Empirical work has consistently shown that

sustained real overvaluation is associated with weaker industrial performance and slower long-run growth.

The mechanism advanced here is complementary but distinct. Whereas the Dutch disease literature emphasizes the reallocation of factors between tradables and nontradables, this paper focuses on the profitability of tradables themselves under dominant-currency pricing, reframing the exchange rate–growth link in terms of local-currency profitability rather than relative-price competitiveness.

2.3 Export-led growth and regional divergence

Finally, the paper contributes to the literature on the divergent growth experiences of East Asia and Latin America. Existing accounts have highlighted differences in institutions, governance, industrial policy, and saving behavior (Amsden, 1989, Rodrik, 1995, Hausmann et al., 2007).

This paper adds a complementary macroeconomic explanation: differences in the trajectory of X_t^{LC} under DCP. In East Asia, export booms coincided with sustained local-currency profitability, encouraging reinvestment and the expansion of tradables; in Latin America, large appreciations compressed X_t^{LC} and prevented export booms from being sustained, especially in manufacturing. By linking these regional outcomes to profitability dynamics under DCP, the paper provides a unified explanation for why East Asia sustained high saving and investment rates while Latin America did not.

This analysis also connects to research on terms-of-trade shocks and saving behavior (Obstfeld, 1982, Gelb, 1988, Bernanke, 2005). While that literature interprets saving responses as reflecting intertemporal preferences, fiscal policy, or financial repression, this paper highlights a complementary accounting mechanism: under DCP, exchange-rate behavior determines whether export windfalls accrue to producers or consumers, and thus whether they translate into higher saving and investment.

3 A Distributional Mechanism Linking Export Booms to Saving under Dominant-Currency Pricing

Export booms raise export receipts in dollars. Under dominant-currency pricing (DCP), however, the impact of a given dollar windfall on domestic saving depends on the exchange rate: with a stable real exchange rate, higher dollar receipts translate largely one-for-one into higher real local-currency export income and wider firm margins; with real appreciation, the same dollar receipts generate a much smaller increase in exporters' domestic purchasing power as the windfall shifts toward consumers through cheaper imports. The real exchange rate therefore acts as a distribution mechanism, allocating export windfalls between high-saving firms and low-saving households. This section formalizes that mechanism and delivers a sharp implication that guides the empirics: national saving tracks real local-currency export income rather than dollar export income per se.

3.1 Export income measured in dollars and in local currency

Let $P^{\$}_{X,t}$ denote the export price in U.S. dollars, Q_t export volume, and S_t the nominal exchange rate (domestic currency per U.S. dollar). Let P_t denote the domestic consumer price index and P^{US}_t the U.S. price level.

Define real export income measured in dollars as

$$X^{USD}_t \equiv \frac{P^{\$}_{X,t} Q_t}{P^{US}_t}. \tag{3.1}$$

Define real export income measured in local currency as

$$X^{LC}_t \equiv \frac{S_t P^{\$}_{X,t} Q_t}{P_t}. \tag{3.2}$$

These objects satisfy

$$X^{LC}_t = X^{USD}_t \cdot R_t, \qquad R_t \equiv \frac{S_t P^{US}_t}{P_t}, \tag{3.3}$$

where R_t is the CPI-based real exchange rate (an increase denotes a real depreciation). This relationship is an identity. Its economic content comes from dominant-currency pricing: when export prices are sticky in dollars and quantities adjust only gradually, exchange-rate movements translate into changes in exporters' domestic-currency revenues and margins rather than being offset by contemporaneous price or quantity adjustments.

3.2 The real exchange rate as a distribution mechanism

To see the mechanism, consider an increase in dollar export prices that raises X_t^{USD}. How this windfall affects domestic income—and thus saving—depends on the behavior of the real exchange rate.

Let real wage income be

$$RW_t \equiv \frac{W_t L_t}{P_t}, \tag{3.4}$$

where W_t is the nominal wage and L_t employment. Real local-currency export income is

$$RLX_t \equiv X_t^{LC} = \frac{S_t P_{X,t}^{\$} Q_t}{P_t}. \tag{3.5}$$

Taking logs and differentiating,

$$\Delta \log RLX_t = \Delta \log S_t + \Delta \log P_{X,t}^{\$} + \Delta \log Q_t - \Delta \log P_t, \tag{3.6}$$

and

$$\Delta \log RW_t = \Delta \log W_t + \Delta \log L_t - \Delta \log P_t. \tag{3.7}$$

To capture incomplete pass-through of exchange-rate movements into consumer prices, assume

$$\Delta \log P_t = \theta \, \Delta \log S_t, \qquad 0 < \theta < 1, \tag{3.8}$$

reflecting imported consumption goods and incomplete pass-through.[1] With $\theta < 1$, nominal exchange-rate movements translate into movements in the real exchange rate $R_t = S_t P_t^{US}/P_t$, and thus redistribute purchasing power between exporters and consumers.

Then

$$\Delta \log RLX_t = \Delta \log P_{X,t}^{\$} + \Delta \log Q_t + (1-\theta)\Delta \log S_t, \tag{3.9}$$

$$\Delta \log RW_t = \Delta \log W_t + \Delta \log L_t - \theta \Delta \log S_t. \tag{3.10}$$

A nominal depreciation raises exporters' real income and margins while lowering real wage income through higher consumer prices; a nominal appreciation does the opposite. Under DCP, where dollar export prices are sticky and quantities adjust only gradually, these exchange-rate-driven shifts translate into movements in exporters' real margins and households' real

[1] Nothing in the argument requires this reduced-form representation; it is used only to make the distributional effects transparent.

purchasing power. In this sense, the real exchange rate acts as a *distribution mechanism*, allocating a given dollar export windfall between firm margins and consumer purchasing power.

This mechanism does not require that export revenues equal profits. If exporters use imported intermediates with share α, the component of export income accruing to domestic value added scales with $(1-\alpha)RLX_t$. Higher imported-input intensity attenuates—but does not reverse—the mapping from local-currency export income to domestic profitability, a point examined empirically in Section 6 and Annex G.

3.3 From distribution to national saving

Let national saving be the sum of saving by firms and households. Let Y_t^F denote firm income generated by the export sector (profits and retained earnings), and Y_t^H household real income. Changes in national saving satisfy

$$\Delta SAV_t \approx s_F \Delta Y_t^F + s_H \Delta Y_t^H, \qquad s_F > s_H, \tag{3.11}$$

where firms have a higher marginal propensity to save than households.

Under DCP, the firm-income component of an export boom loads on real local-currency export income:

$$\Delta Y_t^F \propto \Delta X_t^{LC}, \tag{3.12}$$

while appreciation-driven increases in household purchasing power primarily affect ΔY_t^H. As a result, a rise in dollar export income increases national saving only to the extent that it translates into higher real local-currency export income. Exchange-rate movements therefore govern the pass-through from global export conditions to saving by reallocating income between high-saving firms and low-saving households.

Role of fiscal policy. The mechanism in this section operates through the effect of exchange-rate movements on firms' real local-currency income and margins. Fiscal policy can amplify or dampen the translation of firm windfalls into national saving by altering how much of the windfall is taxed and whether the proceeds are saved or absorbed through higher public spending and transfers. The saving elasticity estimated in the empirical sections should therefore be interpreted as a reduced-form relationship, with fiscal behavior contributing to cross-country heterogeneity around it rather than as a separate mechanism.

3.4 Testable implications

The mechanism yields three sharp implications.

First, *national saving should respond strongly to changes in real local-currency export income*, scaled by GDP, because this variable captures the domestic purchasing-power income of exporters.

Second, *dollar export income is not a reliable guide to the saving response*, because exchange-rate movements can cause the same dollar export price shock to generate very different changes in exporters' real local-currency income and margins.

Third, *the saving response should line up with the profitability shock*, rather than appearing only with long lags through investment and capacity expansion.

These implications motivate the empirical strategy in the sections that follow, which examines five-year changes in saving and export income and exploits cross-country variation, natural experiments, and out-of-sample prediction to assess the mechanism. Annex D discusses why this mechanism reflects exchange-rate–driven profitability under dominant-currency pricing rather than a national-accounts identity, and contrasts it with alternative invoicing paradigms.

Not a national-accounts identity. A natural concern is that the link between changes in saving and changes in X^{LC} is mechanical, since $X_t^{LC} = X_t^{USD} \cdot R_t$ is an identity. The mechanism here is not an accounting statement about saving levels but a behavioral prediction about *saving rates*: under dominant-currency pricing, movements in R_t reallocate a given export windfall between exporters' domestic-currency profitability and households' purchasing power, and these groups have different saving propensities. This is why the empirical diagnostic is asymmetric: saving responds to changes in real local-currency export income but not to dollar export income once X^{LC} is included.

Commodity and manufacturing booms. The same profitability mechanism applies to both commodity- and manufacturing-based export booms: in commodity booms the dollar shock operates primarily through prices, while in manufacturing booms it operates primarily through quantities. In both cases, exchange-rate behavior governs how the dollar windfall translates into local-currency export income and firm margins. Annex E provides country evidence illustrating these dynamics and their connection to Dutch-disease patterns.

4 Case Studies: China, Brazil, and Peru

4.1 A Tale of Three Export Booms

This section compares three major export booms—China between 1990 and 2007, Brazil between 2002 and 2012, and Peru over the same period.[2] In all three economies, per-capita dollar export income rose sharply, yet the macroeconomic outcomes diverged markedly. China illustrates a high-saving outcome that arises when a relatively stable real exchange rate allows rising dollar receipts to pass through into higher local-currency export income, profitability, and retained earnings. China maintained this stability through substantial reserve accumulation. Brazil, by contrast, experienced a pronounced real appreciation during the mid-2000s commodity boom, with comparatively limited foreign-exchange intervention, so that the rise in dollar export receipts translated much less into local-currency export income and tradable-sector margins. Peru followed a managed float under which real-exchange-rate movements were more moderate, yielding a stronger pass-through from dollar receipts to local-currency export income and exporters' margins than in Brazil. Under dominant-currency pricing, these contrasting real-exchange-rate paths have direct causal implications for the distribution of export windfalls between producer margins and consumer purchasing power, and therefore for the incentives to save. The purpose of the comparison is to illustrate this profitability–saving mechanism given observed exchange-rate paths, not to treat the exchange rate as policy-primitive or to provide a welfare ranking of exchange-rate regimes.

In China, the broadly stable real exchange rate allowed rising dollar export receipts to pass through almost one-for-one into higher local-currency export income. Exporters' profitability in domestic terms increased steadily, supporting high retained earnings, investment, and saving. Under dominant-currency pricing (DCP), China illustrates how exchange-rate stability allows export booms to translate directly into profitability and sustained expansion of tradable capacity. While several institutional factors have been proposed to explain China's high saving rate, these evolve too slowly to match the timing of the 2000–07 surge. Annex F summarizes this comparison.

Fiscal policy reinforced the profitability–saving channel. Rising export receipts boosted revenues faster than expenditures, improving the general-government balance and strengthening the primary surplus (Figure 4.4). By saving a larger share of the windfall rather than translating it into domestic

[2]Data sources and construction of the main variables are detailed in Annex A. The sources of other variables are discussed in Annex B

absorption, fiscal restraint raised public saving and reinforced the increase in national saving, helping sustain the investment boom.

Brazil illustrates the opposite configuration: real appreciation and fiscal expansion shifted a larger share of the export windfall toward domestic absorption, turning its commodity boom into a consumption boom. The commodity boom of the 2000s coincided with a sharp real appreciation that largely offset the increase in dollar export receipts in local-currency terms, leaving exporters' local-currency profitability comparatively weak. At the same time, the appreciation likely brought monetary-policy benefits by lowering import prices and helping contain inflationary pressures; more aggressive efforts to resist appreciation would typically have required tighter monetary conditions and/or other measures with their own costs. Despite weaker profitability in tradables, aggregate investment rose— concentrated in construction, real estate, and services—and was financed mainly through large capital inflows and rapid domestic credit growth. With tradable margins compressed, a larger share of investment and demand shifted toward nontradables rather than toward an expansion of export capacity.

Peru represents an intermediate case, where moderate appreciation and fiscal saving coincided with sustained profitability and investment. Peru experienced only a modest appreciation, allowing local-currency export income to rise alongside dollar receipts. This episode also coincided with a period of substantial structural and macroeconomic reforms—including the strengthening of the inflation-targeting framework, fiscal rules, and broader reforms that improved the environment for private investment and facilitated expansion beyond mining. These changes were not slow-moving on the relevant horizon and likely complemented the profitability channel emphasized here. Strong retained earnings were associated with high domestic saving and investment without heavy reliance on foreign capital, and much of the investment growth occurred in tradable sectors such as mining and manufacturing. Relative exchange-rate stability thus limited the compression of exporters' margins and supported more self-financed capacity growth.

Fiscal developments mirrored these dynamics. In Peru, the fiscal position improved markedly during the boom years, with the general-government balance shifting into surplus and public debt declining steadily (Figure 4.5). In Brazil, by contrast, the primary balance weakened after 2004 and public debt stabilized rather than falling. Differences in effective real interest rates were also an important driver of Brazil's debt dynamics. Under DCP, these fiscal choices shaped how the export windfall was absorbed: fiscal restraint in Peru raised public saving, whereas fiscal expansion in Brazil shifted the windfall toward domestic demand and was associated with stronger

appreciation pressures.

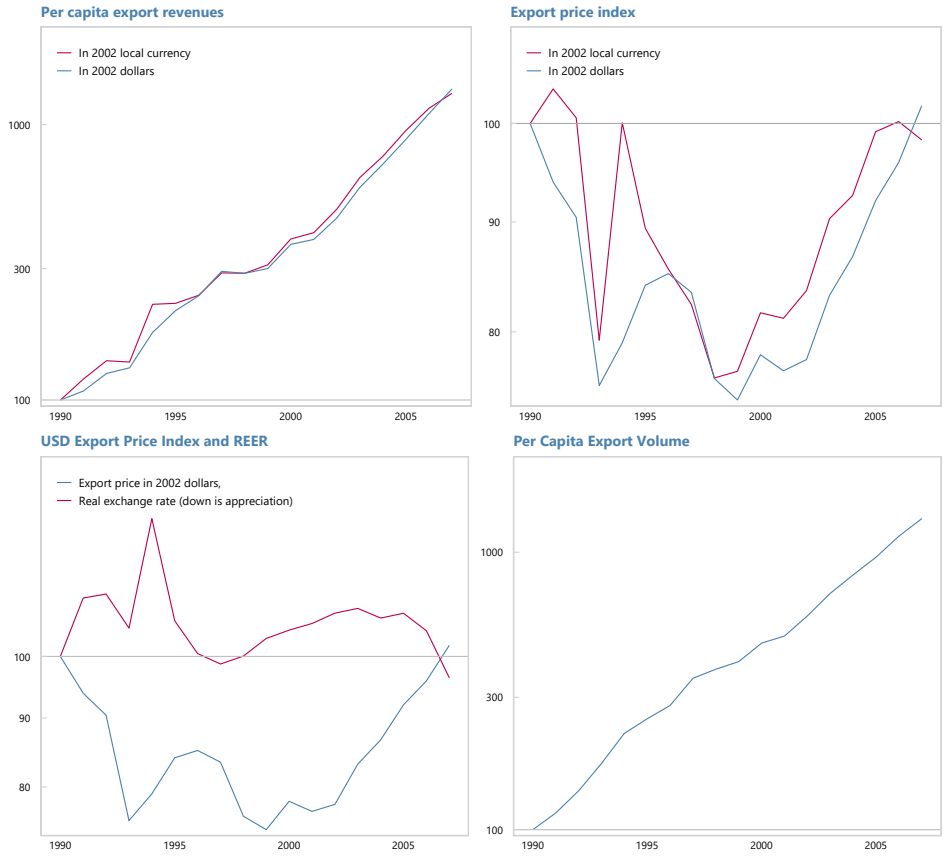
The macroeconomic consequences of these divergent profitability paths are striking. Despite similar export booms, investment in Brazil was less sustained and fell sharply after the commodity cycle ended (Figure 4.6), while Peru's more moderate appreciation coincided with less compression of tradable profitability and a longer-lasting expansion. The comparison illustrates how differences in real-exchange-rate paths and fiscal behavior are associated with divergent accumulation dynamics under DCP.

Taken together, these three cases illustrate the mechanism proposed here: under dominant-currency pricing, it is not dollar export revenues but domestic-currency export income—and hence exporters' local profitability—that drives saving, investment, and growth. When real exchange rates are relatively stable, as in China and Peru, export booms translate more directly into local-currency profit booms and rising saving. When appreciations are larger, as in Brazil, that pass-through is weaker and a larger share of the windfall accrues to domestic absorption, contributing to a domestic-demand boom.

While the model treats the real exchange rate as an exogenous driver of profitability, in practice real-exchange-rate movements are shaped by a range of domestic policies and structural features, including foreign- exchange intervention, fiscal positions, wage-setting institutions, and capital flows. The purpose of the framework is therefore not to claim that the exchange rate itself is primitive, but to show that, given an observed real-exchange-rate path, the profitability channel describes how export booms translate into corporate saving and investment. The cross-country evidence should thus be interpreted as consistent with the operation of this channel, rather than as a claim that it is the sole underlying cause of the observed saving dynamics.

Figure 4.1. China: Export Boom, 1990-2007.

(Index, 1990=100)



Sources: UN National accounts.
Export revenues and export price index have been deflated by CPI.

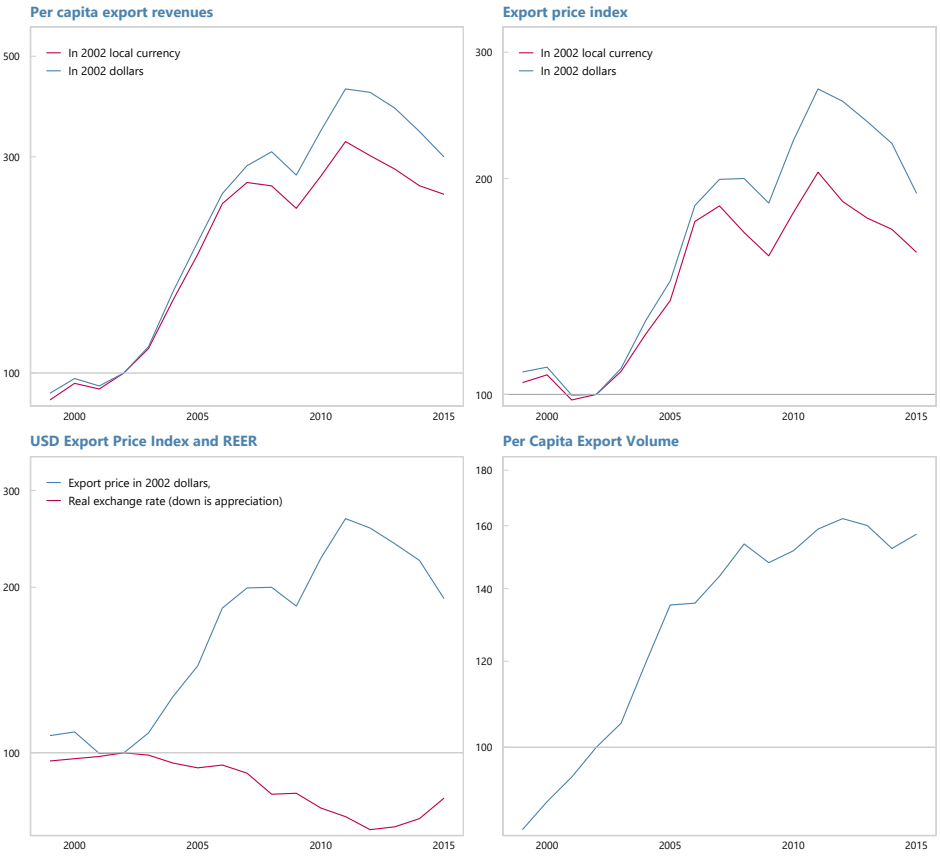
Figure 4.2. Brazil: Export Boom, 1998-2015.

(Index, 2002=100)

Sources: UN National accounts.
Export revenues and export price index have been deflated by CPI.

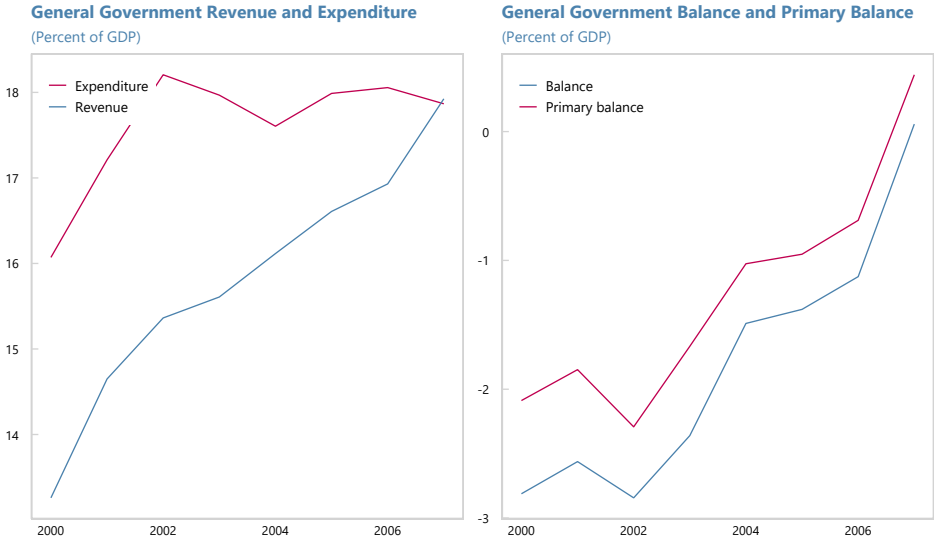
Figure 4.3. Peru: Export Boom, 1998-2015.

(Index, 2002=100)



Sources: UN National accounts.
Export revenues and export price index have been deflated by CPI.

Figure 4.4. China: Fiscal Policy, 2000-2007



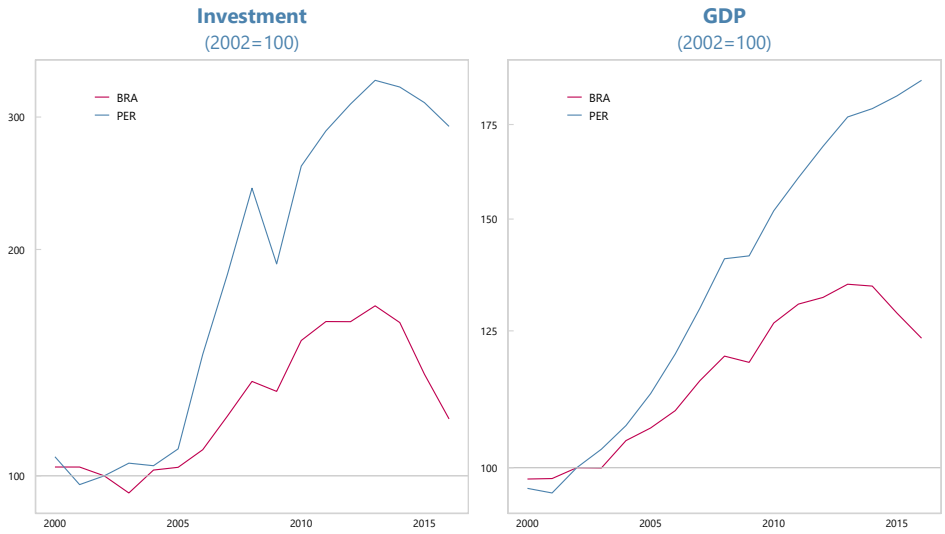
Sources: IMF, WEO database..

Figure 4.5. Brazil and Peru: Fiscal Policy, 2002-2012

Sources: IMF, WEO database.

Figure 4.6: Brazil and Peru: Per Capita Real Investment and GDP

(Index, 2002 = 100)



Sources: UN National accounts.

4.2 China After 2007

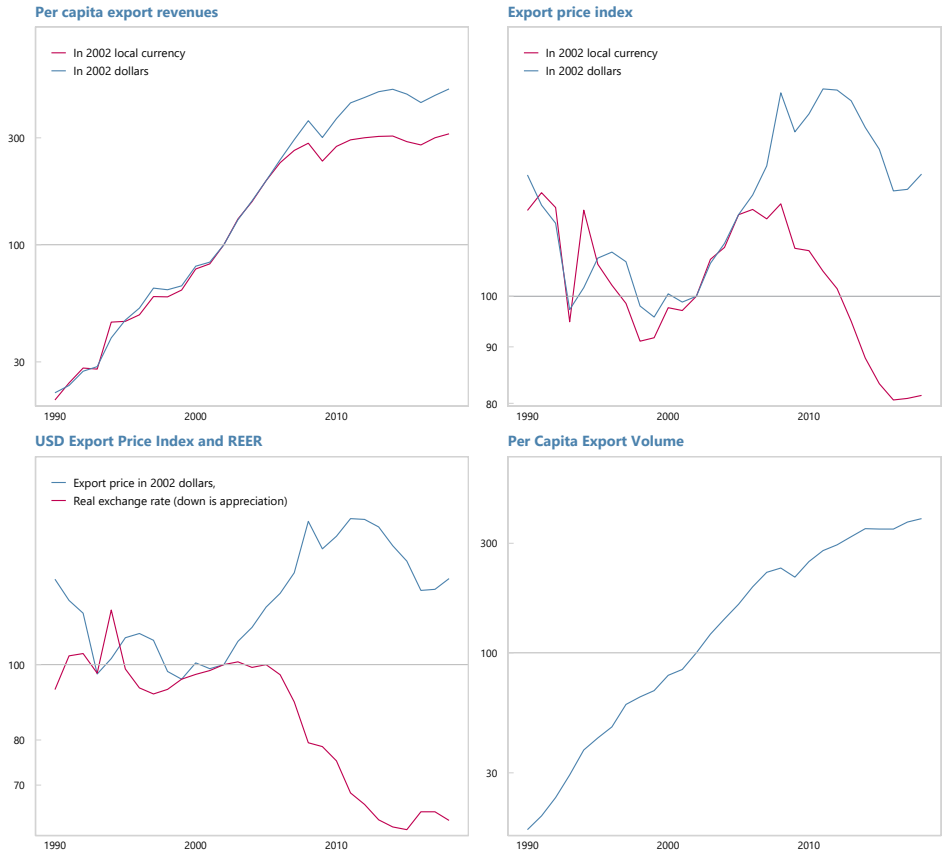
Developments in China after 2007 further illustrate the mechanism. Beginning in 2006, China's real exchange rate appreciated sharply, reducing export prices in real local-currency terms (Figure 4.7). As a result, growth in local-currency export income slowed markedly, and export volumes decelerated as well.

This shift was mirrored in macroeconomic aggregates: per-capita real investment and GDP growth both slowed sharply after 2007 (Figure 4.8). The same pattern is evident in corporate profitability (Figure 4.9): industrial profits surged during the period of exchange-rate stability and rapid export expansion but declined sharply after 2007 as the appreciation compressed exporters' margins.

These macro aggregates mirror the profitability dynamics highlighted above, linking local-currency export income to national saving and the current account.

Figure 4.7. China: Export Boom Post 2007.

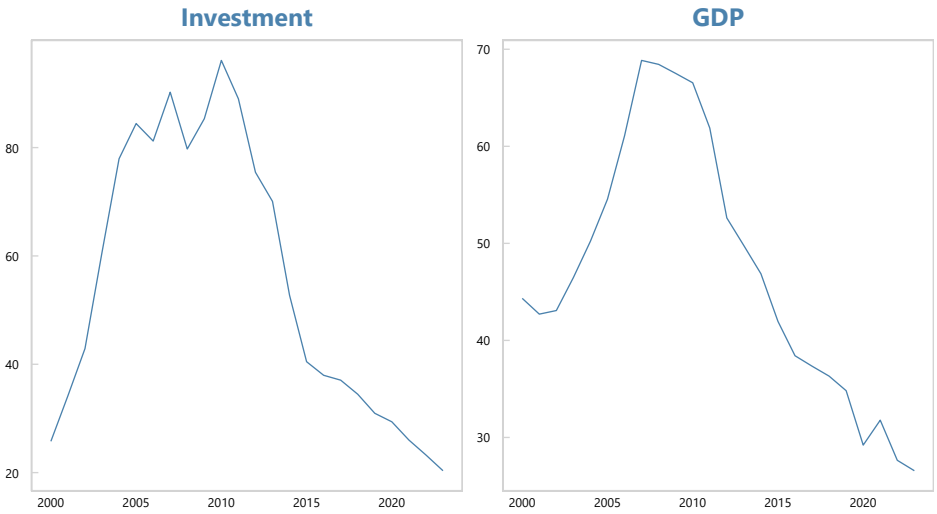
(Index, 2002=100)



Sources: UN National accounts.
Export revenues and export price index have been deflated by CPI.

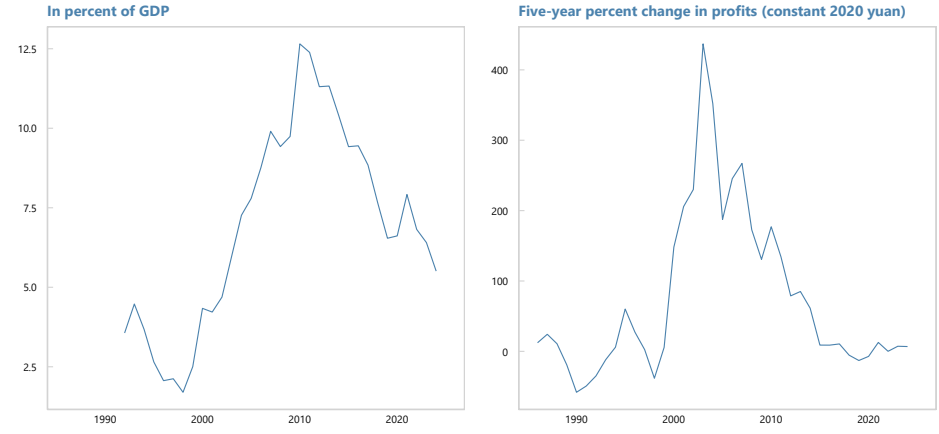
Figure 4.8: China: Per Capita Real Investment and GDP

(Five year change, in percent)



Sources: UN National accounts.

Figure 4.9. China: Profits of Industrial Enterprises



Source: Haver

4.3 Saving, Investment, and External Balance

The evolution of saving, investment, and the current account provides a macroeconomic reflection of the profitability dynamics described above (Figure 4.10). In Brazil, saving rose somewhat during the early years of the commodity boom but soon stagnated and later declined as the real exchange rate appreciated and exporters' local-currency profitability weakened. Investment increased only modestly, and the current account gradually deteriorated, shifting from a small surplus in the early 2000s to a deficit by 2008.

In Peru, saving rose sharply in the early phase of the boom, supported by high export revenues and sustained local-currency profitability. Investment responded with a lag, increasing after 2006 as firms expanded capacity. The current account moved into surplus early in the boom and later narrowed as investment accelerated.

These patterns align closely with the mechanism of the paper: under dominant-currency pricing, real exchange rate movements shape the pass-through from dollar export receipts to local-currency profitability and therefore the saving response to export booms. Economies with more stable real exchange rates—such as Peru—exhibited a stronger rise in saving followed by a subsequent increase in investment. Economies experiencing sharper appreciations—such as Brazil—showed an earlier but less sustained saving response as profitability weakened, alongside a gradual deterioration in the external balance.

Figure 4.10. Brazil and Peru: Saving, Investment and Current Account

(Percent of GDP)

Sources: World Bank

5 Local-Currency Export Income and National Saving

This section provides empirical evidence linking movements in real local-currency export income to national saving, beginning with China and extending to a broad cross-country sample.

5.1 The mechanism

The case studies above showed that the macroeconomic impact of export booms depends not only on their magnitude but also on how exchange-rate behavior shapes exporters' profitability. This section develops that mechanism further, beginning with China's experience and then showing that the same relationship holds systematically across a broad panel of economies. Under dominant-currency pricing, the link between exports and saving operates not simply through export volumes, but through *profitability and its spillovers across the rest of the economy*. Higher profitability in tradables raises corporate retained earnings, tax revenues, and household income, thereby increasing national saving.

During the 2000s, China's saving-to-GDP ratio rose sharply—from about 38.8 percent in 2002 to 48.6 percent by 2007 (Figure 5.1). The main *trigger* was the corporate sector. Following WTO accession, China experienced a massive export boom. Because the renminbi remained broadly stable against the dollar, real domestic-currency export income accelerated sharply (Figure 5.2).

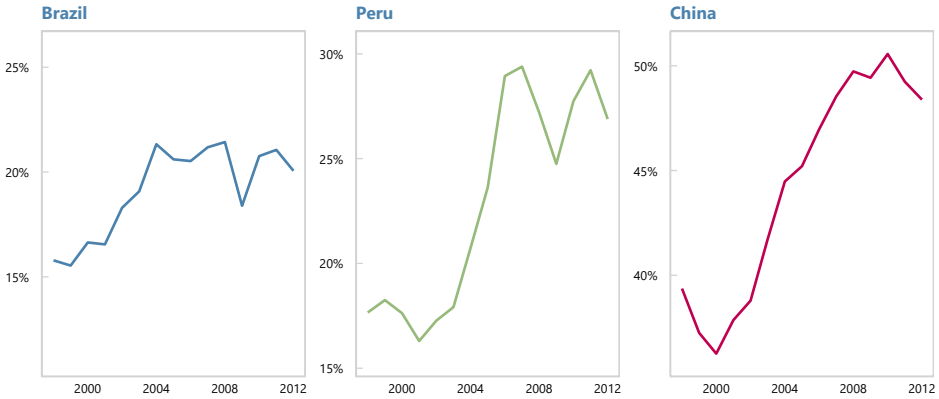
Figure 5.3 shows that corporate saving in China moves almost one-for-one with corporate profits. Periods of rising profitability—particularly during the export boom of the early 2000s—are accompanied by sharp increases in corporate saving, while episodes in which margins are compressed coincide with declines in saving. This tight co-movement confirms that corporate saving is fundamentally driven by corporate profits: when profitability rises, retained earnings rise in parallel. The mechanism emphasized in this paper therefore operates through the corporate sector, where changes in export-driven profitability translate directly into changes in saving.

The rise in profitability triggered a broad-based increase in national saving (Figure 5.4). About a quarter of the rise came from corporate saving, half from government saving, and a sixth from household saving. This pattern strengthens the interpretation of the profitability–saving link as macroeconomic rather than purely sectoral: the initial rise in exporters' margins set in motion a cascade of income gains that expanded saving across all major sectors of the economy.

The connection between local-currency export income and national saving is clear in China's data: five-year changes in national saving closely tracked five-year changes in real local-currency export income (Figure 5.5). The movements in export income reflected both higher dollar export revenues and a broadly stable exchange rate, which together amplified exporters' profitability under dominant-currency pricing.

Figure 5.1. Saving-to-GDP Ratio

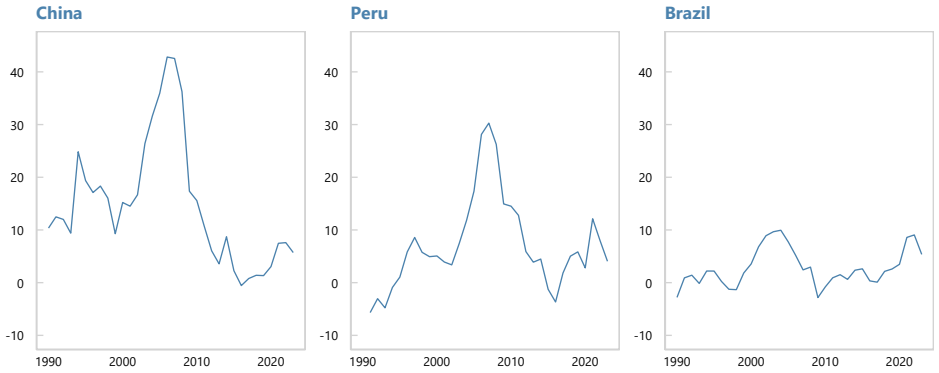
(Percent)



Source: UN National Accounts.

Figure 5.2. Five-year change of CPI-deflated local currency export income

(In percent of 5 year lagged GDP)



Sources: UN National accounts

Figure 5.3. China: 5-Year Change in Saving and Profits of the Non-Financial Corporate Sector

(In percent of five-year lagged gross value added)

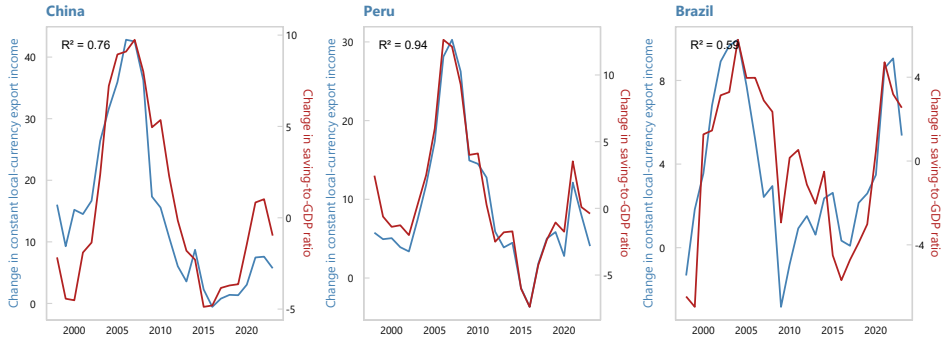
Note: both series refer to the non-financial corporate sector.

Figure 5.4. China: Change in Saving to GDP Ratios Since 2000

(Percentage points change from 2000)

Figure 5.5. Five-year change of real domestic currency export income and five-year change of Saving-to-GDP ratio

(Change in export income in percent of 5 year lagged GDP)



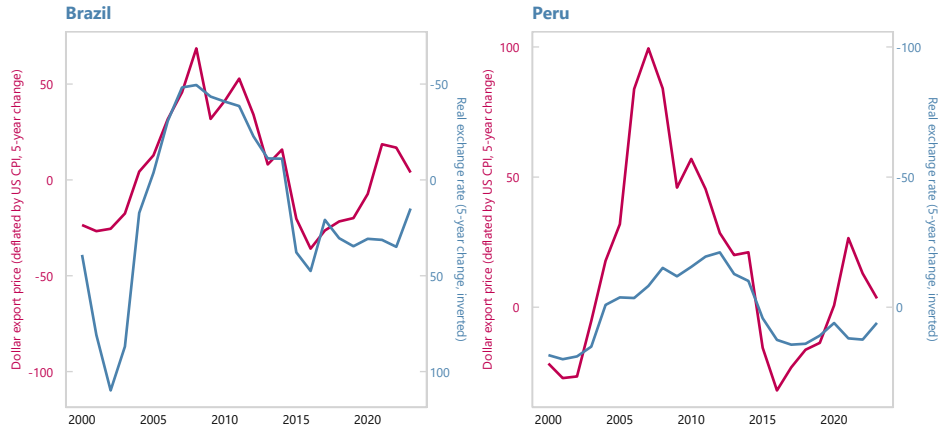
Sources: UN National accounts

5.2 The virtuous cycle

Higher saving can, in turn, finance capacity expansion and higher future exports. A virtuous cycle thus emerges: export income, profitability, and saving reinforce one another as long as the real exchange rate remains stable or competitive. When the currency appreciates sharply, export margins compress, profitability declines, and the cycle reverses. This feedback loop between export profitability and saving is central to understanding why some export booms are sustained and others are not.

The same feedback loop is visible beyond China. Figure 5.6 compares Brazil and Peru during the 2000s commodity boom. In both economies, dollar export prices—deflated by the U.S. CPI—rose sharply, yet outcomes diverged. In Peru, the real exchange rate remained broadly stable, allowing local-currency export income and national saving to continue rising. In Brazil, real appreciation offset the dollar-price gains, compressing exporters' margins and halting the increase in saving. The contrast illustrates how, under dominant-currency pricing, exchange-rate behavior determines whether global price shocks translate into higher domestic profitability and sustained saving growth.

Figure 5.6. Brazil and Peru: Dollar Export Prices and Real Exchange Rate Changes



Sources: UN National accounts

5.3 From China to the cross-country evidence

Similar patterns emerge across a wider range of economies. Figure 5.7 plots five-year changes in national saving against five-year changes in real local-currency export income for six representative countries— Chile, Argentina, Mexico, India, Czechia, and Poland. In every case, the two variables move closely together, with R^2 values between 0.46 and 0.87. The consistency of this co-movement across diverse regions and export structures reinforces the central finding: under dominant-currency pricing, movements in the real exchange rate and world export prices that alter exporters' local-currency income systematically shape national saving.

Building on these cross-country patterns, we next examine whether the relationship between local-currency export income and national saving holds systematically across a broad panel of economies. The dataset covers eight five-year periods from 1982–87 through 2017–22 and includes all countries with GDP above USD 100 billion in 2017, excluding oil exporters, financial hubs, Vietnam (due to data gaps), and Ukraine.[3] Economies with a domestic-value-added share in exports below 60 percent (Hungary, Malaysia and Slovakia) are also excluded, since in these cases much of gross export revenue accrues to foreign suppliers rather than domestic producers. Annex G shows that results are robust to adjusting for imported-input intensity.

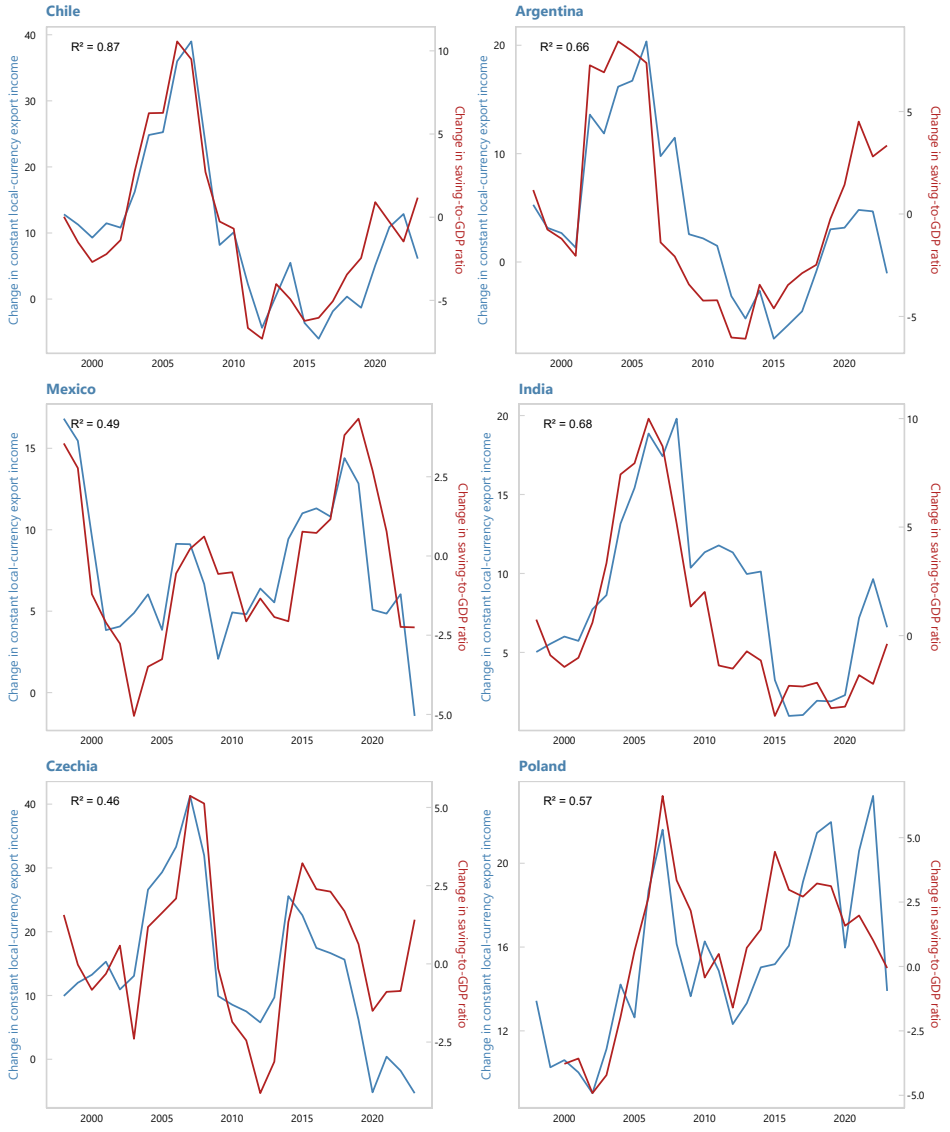
Within this dataset, we decompose the drivers of saving changes into their fundamental export components. The five-year change in the saving-to-GDP ratio is regressed on the corresponding changes in (i) dollar export prices, (ii) export volumes, and (iii) the real exchange rate. Each component enters with the expected positive sign: higher export prices, larger export volumes, and real depreciations all raise saving. These results (Table 5.1) confirm that saving responds to the full transmission of export booms—through world prices, quantities, and exchange-rate movements that affect local-currency profitability—rather than to export volumes alone.

Because these three elements move together in practice, it is convenient to summarize them by a single aggregate measure of exporters' purchasing-power income: *real local-currency export income* $\left(X_t^{LC} \equiv \frac{P_{X,t}^{\$} S_t Q_t}{P_t}\right)$. This variable combines export prices, volumes, and the real exchange rate into one measure that captures how global shocks and exchange-rate movements jointly affect profitability.

[3] A full list of countries is in Annex C.

Figure 5.7. Five year change in local currency income and five year change in saving-to-GDP ratio

(Percent)



Source: UN National Accounts.

By construction,

$$X_t^{LC} = \frac{P_{X,t}^{\$} S_t Q_t}{P_t} = X_t^{USD} \times R_t, \quad \text{so in logs} \quad \Delta \log X_t^{LC} \approx \Delta \log P_{X,t}^{\$} + \Delta \log Q_t + \Delta \log R_t.$$

Because this identity already embeds export *prices* ($P_{X,t}^{\$}$), *volumes* ($Q_t$), and the *real exchange rate* (R_t), including any of these components as separate controls or instruments would amount to regressing an identity rather than testing an economic relationship. The analysis therefore focuses on the reduced-form elasticity of national saving with respect to $\Delta \log X_t^{LC}$, and identification is evaluated through timing, policy, and quasi-experimental variation rather than by partialling out its definitional elements.

Table 5.1: Determinants of 5-Year Changes in the Saving-to-GDP Ratio

	Dependent variable:
	$\Delta_5 (S/Y)$
	β (s.e.)
Δ_5 REER	0.078^{***}
	(0.009)
$\Delta_5 P_X^{\$(\text{real})}$	0.080^{***}
	(0.010)
$\Delta_5 \frac{Q_X}{POP}$	0.058^{***}
	(0.006)
Constant	-1.943^{***}
	(0.272)
Observations	321
R^2	0.339
Adjusted R^2	0.333

*p<0.1; **p<0.05; ***p<0.01

Table 5.2 reports the corresponding panel regressions of the five-year change in the saving-to-GDP ratio on the change in X^{LC} (as a share of lagged GDP). The coefficient is about 0.27, highly significant and stable across specifications, implying that a one-percentage-point-of-GDP increase in exporters' real local-currency income is associated with roughly a 0.27-percentage-point rise in the national saving rate. Figure 5.8 illustrates this global relationship: each dot represents a country-period observation, and the fitted line summarizes the tight co-movement between changes in X_{LC} and changes in the national saving rate.

Table 5.2: Determinants of 5-Year Changes in the Saving-to-GDP Ratio

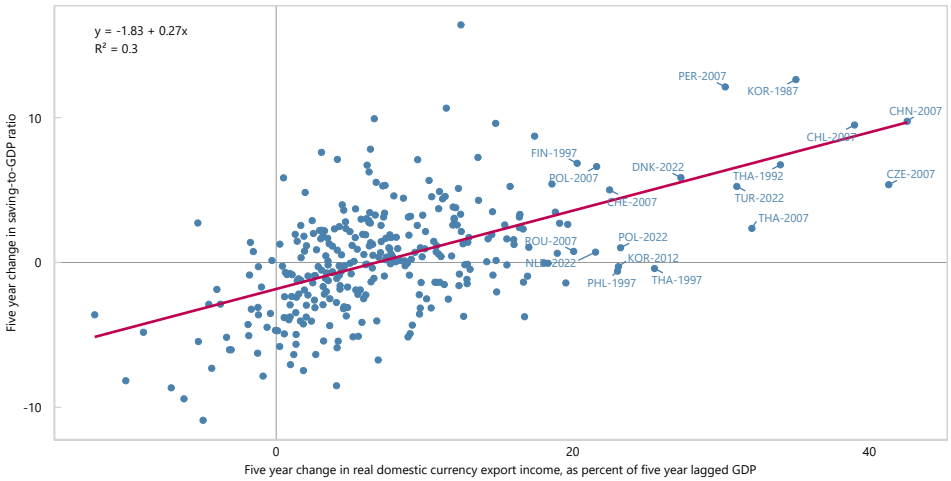
	Dependent variable:					
	Δ_5 (Saving / GDP)					
	LC only	USD only	GDP only	LC + USD	LC + GDP	All
	(1)	(2)	(3)	(4)	(5)	(6)
Δ_5 Local-currency export income	0.27***			0.29***	0.24***	0.27***
	(0.02)			(0.03)	(0.03)	(0.03)
Δ_5 Dollar export income		0.11***		−0.02		−0.03
		(0.02)		(0.02)		(0.02)
Δ_5 Real GDP per capita (USD)			0.10***		0.04**	0.05***
			(0.02)		(0.02)	(0.02)
Constant	−1.83***	−0.68***	−1.06***	−1.82***	−2.10***	−2.12***
	(0.25)	(0.24)	(0.27)	(0.25)	(0.27)	(0.27)
Observations	321	321	321	321	321	321
R^2	0.30	0.11	0.12	0.30	0.32	0.32
Adjusted R^2	0.30	0.11	0.12	0.30	0.31	0.32

*p<0.1; **p<0.05; ***p<0.01

Note:

Five-year change in per-capita real local-currency income divided by five-year-lagged per-capita GDP (deflated by CPI); Five-year change in per-capita real dollar income divided by five-year-lagged per-capita GDP (deflated by U.S. CPI); Five-year change in real per-capita GDP divided by five-year-lagged real per-capita GDP.

Figure 5.8. Five year changes in domestic currency export income and five year change in saving-to-GDP ratio, 1982–2022



The figure shows five-year changes for the intervals 1982-1987 to 2017-2022, for all economies with GDP of more than 100 billion USD in 2017 that are not oil-exporters or financial hubs. HUN, MYS and SVK are also excluded because of the low domestic value added share in their exports.

When export income is measured in dollars instead of local currency, the coefficient falls by more than half, showing that what matters for saving is the domestic purchasing power of export revenues rather than their dollar value.

The coefficient on ΔX^{LC} should not be expected to be identical across countries. It captures the average propensity to save out of additional local-currency export income. Heterogeneity reflects differences in how increases in local-currency export income translate into higher national saving—for example through corporate retention behavior, fiscal absorption, or the distribution of profits between firms, households, and the government. The pooled estimate therefore summarizes a common mechanism rather than a uniform magnitude across countries. This heterogeneity also helps explain why the fit of the regression is not perfect: even though the underlying relationship between export-driven income and saving is strong and robust, country-specific institutional and policy differences naturally produce deviations around the common slope.

Countries that maintain persistently stable exchange rates often also

exhibit higher saving rates, reflecting shared structural characteristics such as fiscal discipline, export orientation, and financial depth. These underlying traits may influence both exchange-rate policy and long-run saving behavior. However, such features evolve only gradually and cannot account for the large medium-term swings in national saving that occur during export booms and reversals. The five-year-difference specification focuses precisely on these within-country changes, which are driven primarily by shifts in export profitability under dominant-currency pricing rather than by slow-moving structural factors.

Because all specifications are estimated in five-year differences, any slow-moving country characteristics that jointly influence saving and exchange-rate policy are already differenced out. The results therefore reflect within-country changes over time rather than persistent cross-country differences.

The persistence of this elasticity across countries and periods suggests that the relationship is broadly structural rather than episodic. Section 6 turns from estimation to validation, showing that the same mapping appears under different kinds of variation—policy-driven, external, and crisis-related alike.

6 Mechanism Validation

The cross-country evidence in Section 5 shows that changes in real local-currency export income systematically predict changes in national saving. This section demonstrates that the profitability mechanism explains this relationship through out-of-sample prediction, natural experiments, and comparative evidence.

6.1 Out-of-Sample Prediction: China's Saving Dynamics

China's experience provides the most demanding test of the mechanism. Between 2002 and 2007, the national saving rate rose from 38.8 to 48.5 percent of GDP—a 9.7 percentage-point increase unprecedented in peacetime. After 2007, saving declined, falling back toward 48.4 percent by 2012. We test whether the cross-country elasticity estimated in Section 5 can account for both movements.

Re-estimating the baseline specification (Table 6.1, column 1) excluding China yields a coefficient of 0.27 (standard error 0.02) on five-year changes in real local-currency export income—identical to the full-sample estimate. The coefficient, estimated from 41 other economies over four decades, captures the typical saving response to changes in exporters' real purchasing power.

Table 6.1: Determinants of 5-Year Changes in the Saving-to-GDP Ratio, excluding China

	Dependent variable:					
	Δ_5 (Saving / GDP)					
	LC only	USD only	GDP only	LC + USD	LC + GDP	All
	(1)	(2)	(3)	(4)	(5)	(6)
Δ_5 Local-currency export income	0.27***			0.29***	0.24***	0.27***
	(0.02)			(0.03)	(0.03)	(0.03)
Δ_5 Dollar export income		0.10***		−0.01		−0.03*
		(0.02)		(0.02)		(0.02)
Δ_5 Real GDP per capita (USD)			0.12***		0.06***	0.06***
			(0.02)		(0.02)	(0.02)
Constant	−1.83***	−0.67***	−1.19***	−1.82***	−2.20***	−2.24***
	(0.25)	(0.24)	(0.28)	(0.25)	(0.27)	(0.27)
Observations	313	313	313	313	313	313
R^2	0.29	0.11	0.13	0.29	0.31	0.32
Adjusted R^2	0.29	0.10	0.12	0.29	0.31	0.31

*p<0.1; **p<0.05; ***p<0.01

Table 6.2: Predicted vs. Actual Changes in China's Saving Rate

Period	ΔX^{LC} **(% of lagged GDP)**	**Predicted ΔSaving (pp)**	**Actual ΔSaving (pp)**	**Prediction Error (pp)**
2002–2007	42.5	+9.6	+9.7	-0.1
2007–2012	6.0	–0.2	–0.2	0.0

Notes: Predicted changes are based on the cross-country elasticity of 0.27 estimated from 41 countries excluding China (see Table 6.1). ΔX^{LC} denotes the five-year change in per-capita real local-currency export income as a share of lagged GDP.

The out-of-sample accuracy is remarkable. A coefficient derived entirely from other economies reproduces China's ten-point swing to within one-tenth of a percentage point.

This timing is critical. Competing explanations for China's high saving—financial repression, state ownership, limited social insurance, or demographic structure—cannot explain why saving surged between 2002 and 2007 and then declined. These structural factors evolve slowly over decades, not within a few years. Annex F shows that none changed substantially during the boom years.

What did change was exporters' profitability under dominant-currency pricing. Between 2002 and 2007, real local-currency export income per capita rose sharply: dollar export receipts surged following WTO accession while the real exchange rate remained stable. Corporate profits climbed from roughly 5 percent of GDP in 2002 to over 12 percent by 2007 (Figure 4.9), concentrated in export-oriented industries. Retained earnings and fiscal revenues increased in tandem, raising corporate and government saving.

After 2007, real appreciation compressed the local-currency value of exports. Even as dollar export receipts continued rising, exporters' domestic purchasing power stagnated. Industrial profits fell from their 2007 peak, fiscal surpluses narrowed, and national saving moderated. The cross-country elasticity correctly predicts this reversal because the same profitability mechanism operates across economies.

The out-of-sample test provides powerful validation: a parameter estimated from forty-one other countries precisely predicts China's saving dynamics. If the observed relationship merely reflected China-specific institutions, it would fail here. It does not. The profitability channel operates systematically across economies and over time.

6.2 Natural Experiment: Argentina's 2002 Devaluation

Argentina's currency crisis provides a quasi-experiment for the profitability channel. When the convertibility regime collapsed in early January 2002, the peso depreciated by roughly 75 percent in real terms within six months. Because exports were invoiced primarily in U.S. dollars under dominant-currency pricing, dollar export prices changed little, but exporters' receipts in pesos multiplied almost overnight.

The profitability mechanism predicts an immediate surge in corporate margins and retained earnings, raising national saving contemporaneously. This is precisely what occurred.

Figure 6.1 documents the sequence. Real local-currency export income per capita rose from an index of 100 in 2001 to roughly 250 by 2003—a 150 percent increase in two years. Real dollar export income, by contrast, increased only modestly over the same period. The national saving rate jumped from 17 percent of GDP in 2001 to 25.9 percent in 2002—an 8.9 percentage-point increase within a single year.

Three features validate the mechanism:

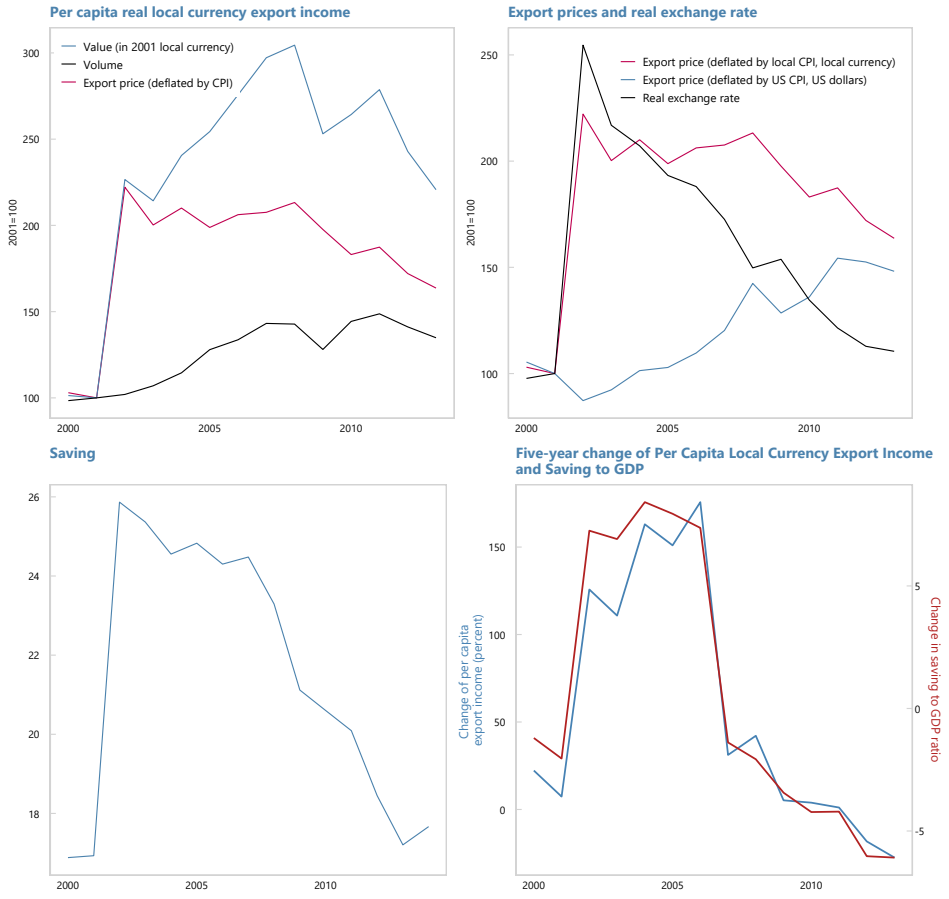
First, the response was immediate. Saving rose in the same year as the devaluation. If the link between higher local export income and higher saving went from higher saving to higher investment and export capacity expansion, the adjustment would unfold over several years. Instead, the contemporaneous response indicates a profitability channel operating through current-income distribution.

Second, quantities barely changed. Export volumes grew only modestly; the main shock was the surge in the local-currency value per unit exported. Under dominant-currency pricing, a real depreciation directly raises exporters' purchasing power without requiring quantity adjustments.

Third, persistence mirrors exchange-rate behavior. As the real exchange rate stabilized at its depreciated level, real local-currency export income and saving remained elevated through the mid-2000s. When appreciation resumed after 2007, both measures declined. The comovement tracks the exchange rate, not post-crisis growth or fiscal policy.

The evidence demonstrates that exchange-rate movements generate immediate profitability shocks under dominant-currency pricing, and that these shocks transmit rapidly into aggregate saving. The 2002 devaluation was exogenous to saving behavior—triggered by financial and political collapse rather than by domestic profitability—yet it produced exactly the saving response the mechanism predicts.

Figure 6.1. Argentina: Export Income and Saving



Sources: UN National accounts. .

6.3 Comparative Policy Episodes: Peru versus Brazil

Peru and Brazil faced broadly similar external tailwinds during the 2000s: both were major commodity exporters that benefited from the global commodity boom. Yet their saving and investment outcomes diverged markedly alongside differences in real-exchange-rate paths and fiscal behavior.

Peru maintained a broadly stable real exchange rate and a conservative fiscal stance. As dollar export prices surged, real local- currency export income rose almost one-for-one with dollar receipts (Figure 5.3). The national saving rate climbed from about 17 percent of GDP in 2002 to 29 percent by 2008. Fiscal surpluses and restrained public spending reinforced this transmission by allowing a larger share of the windfall to accumulate as corporate and public saving rather than being absorbed in domestic demand. Investment followed with a lag, concentrated in tradable sectors—mining, manufacturing, and agriculture—and financed largely through retained earnings.

Brazil, by contrast, experienced substantial real appreciation— around 64 percent[4] between 2003 and 2011—alongside procyclical fiscal expansion. Although dollar export prices rose similarly, appreciation eroded exporters' local-currency revenues (Figure 5.2), and rising public spending absorbed much of the windfall. Real local-currency export income grew only modestly, and the national saving rate remained near 20 percent of GDP. Investment was concentrated in nontradables—construction, real estate, and services—and was financed more through credit expansion and capital inflows than through domestic saving.

This comparison highlights the joint transmission channel emphasized in the paper. Given dominant-currency pricing, the real exchange rate helps determine how a common external shock is translated into local-currency export income and tradable-sector margins, while fiscal policy helps determine how much of the windfall is saved rather than absorbed. Peru's combination of relative exchange-rate stability and fiscal restraint was associated with stronger local-currency profitability and a larger rise in saving, followed by investment concentrated in tradables. Brazil's appreciation and fiscal expansion were associated with a weaker pass- through to tradable profitability, an earlier absorption of the windfall through consumption and public spending, and investment tilted toward nontradables.

Sectoral outcomes are consistent with this mechanism. In Peru, tradable industries sustained investment and employment growth. In Brazil, manufacturing's share of exports fell from about 85 percent in the early 2000s to

[4]The exchange rate went from 100 in 2002 to 36 in 2011.

roughly 50 percent by 2020 (Annex E), consistent with weaker profitability in tradables and a Dutch-disease pattern operating through margin dynamics rather than a pure factor-reallocation channel.

6.4 Beyond Dollar Receipts: Why Saving Tracks Local-Currency Income and Its Distribution

If the saving–export relationship were spurious—driven by omitted factors or general income growth—saving should respond similarly to dollar export income or to overall GDP growth. It does not. Saving responds specifically to export income measured in real local-currency terms, which captures domestic profitability rather than external revenue.

Table 6.2 quantifies this distinction. When both real local-currency export income (X^{LC}) and real dollar export income (X^{USD}) enter the regression jointly (column 4), the coefficient on ΔX^{LC} is **0.29** (t-statistic 9.1), while that on ΔX^{USD} is **–0.01** (t-statistic –0.3, insignificant). Likewise, when X^{LC} and real GDP growth are included together (column 5), the coefficient on X^{LC} remains 0.25, while GDP growth falls to 0.04.

The mechanism explains both asymmetries. Under dominant-currency pricing, dollar export income reflects the world-market value of exports but not their domestic purchasing power. A rise in X^{USD} accompanied by real appreciation leaves exporters' local-currency margins unchanged, so profits and saving do not increase. Conversely, stable dollar receipts combined with real depreciation raise local-currency profitability and saving even without higher volumes or prices. Fiscal restraint reinforces this effect by preventing the windfall from being absorbed through higher public spending. Saving thus responds to the income accruing to domestic producers in real terms—precisely what matters for national saving under dominant-currency pricing.

6.5 Timing, Reverse Causality, and Direction of Effect

Could the correlation between X^{LC} and saving reflect reverse causality—higher saving causing higher export income rather than the reverse? In principle, higher saving could raise X^{LC} through a supply-side channel: greater saving finances investment, investment expands tradable-sector capacity, and higher capacity eventually boosts export volumes and local-currency export income. But this mechanism operates over extended horizons, not within a single five-year period. The transition from saving to investment takes time; the conversion of investment into productive capacity takes additional time; and

the expansion of exports from new capacity unfolds gradually as firms learn, scale up, and penetrate foreign markets. If reverse causality were driving the observed correlation, we would expect saving today to predict export income growth several years hence, not contemporaneously.

The data show no lagged relationship whatsoever. Figure 5.5 plots five-year changes in X^{LC} and the saving rate for China, Peru, and Brazil. In all three cases, the two series move closely together—correlations of 0.87, 0.94, and 0.76, respectively—with saving and export income rising and falling in tandem within the same five-year windows. A distributed-lag regression confirms this contemporaneous timing: when the five-year-lagged change in X^{LC} is added to the baseline specification, the contemporaneous coefficient remains 0.27 ($t = 12.3$) while the lagged term is statistically zero (-0.00, $t = -0.01$). The R^2 is unchanged at 0.33. Saving responds to current changes in export profitability, not to export income from five years earlier.

Could higher saving nevertheless raise X^{LC} through its effect on investment and export capacity? If causality ran from saving to export income, the logical transmission channel would be

$$\text{higher saving} \;\rightarrow\; \text{higher investment} \;\rightarrow\; \text{higher exports.}$$

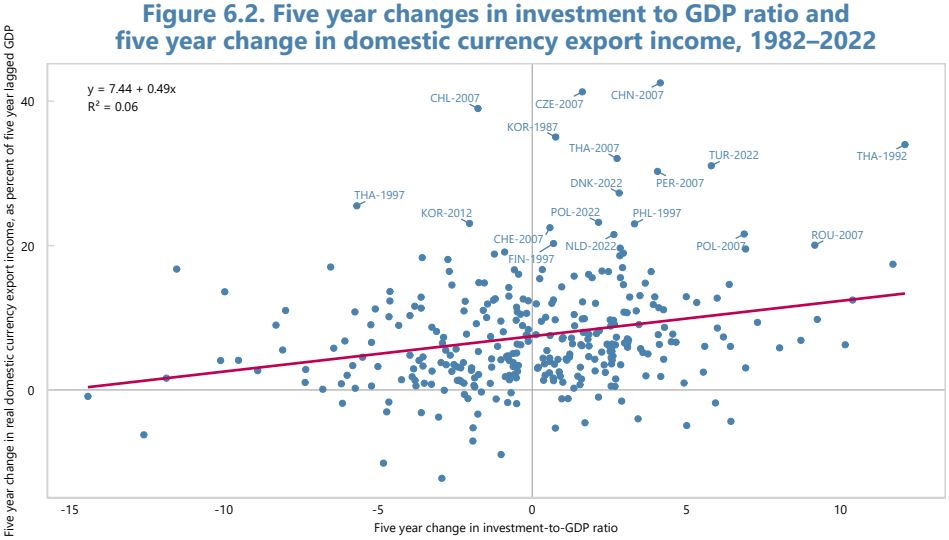
The data, however, do not support this pathway. Across the cross-country panel, a one-percentage-point-of-GDP increase in national saving is associated with only a 0.45-percentage-point rise in investment ($R^2 = 0.17$). Even if that modest link were causal, the next step—from investment to export income—is extremely weak. When the five-year change in real local-currency export income (as a percent of five-year-lagged GDP) is regressed on the five-year change in the investment-to-GDP ratio, the R^2 is near zero (Figure 6.2), and none of the countries with large export booms lies on the regression line. In other words, variations in saving explain only part of the variation in investment, and investment explains almost none of the variation in export income over the relevant horizon. This evidence is hard to reconcile with a saving-driven export channel and reinforces the interpretation that profitability shocks under dominant-currency pricing drive saving, not the reverse.

Natural experiments reinforce this conclusion. Argentina's 2002 devaluation was triggered by financial collapse unrelated to prior saving decisions, yet X^{LC} surged within the same year, and the national saving rate jumped from 17 percent of GDP in 2001 to 26 percent in 2002. There was no multi-year lag; the response was instantaneous. Similarly, China's exchange-rate stability during 2002–2007 resulted from deliberate policy choices—reserve

accumulation and capital controls—designed to prevent appreciation despite rising saving. The stable exchange rate enabled the pass-through from dollar export receipts to local-currency profitability; it was not a consequence of saving dynamics.

The timing pattern is inconsistent with reverse causality through capacity expansion but entirely consistent with the profitability channel. Under dominant-currency pricing, exchange-rate movements immediately alter exporters' local-currency margins. A devaluation or stable rate during an export boom raises profits, retained earnings, and saving contemporaneously, without requiring years of capacity adjustment. The observed contemporaneous correlation thus reflects income-distribution and profitability dynamics, not slow-moving investment and supply responses.

Figure 6.2. Five year changes in investment to GDP ratio and five year change in domestic currency export income, 1982–2022



The figure shows five-year changes for the intervals 1982-1987 to 2017-2022, for all economies with GDP of more than 100 billion USD in 2017 that are not oil-exporters or financial hubs. HUN, MYS and SVK are also excluded because of the low domestic value added share in their exports.

6.6 Exchange-Rate and Fiscal Policy as Transmission Mechanisms

Exchange-rate and fiscal policies jointly determine how dollar export receipts translate into local-currency profitability and national saving. When currencies remain stable and fiscal balances are maintained, export windfalls accrue to producers and translate into higher saving. When currencies appreciate and governments expand spending, windfalls are absorbed through higher consumption. These policy differences explain divergent outcomes across otherwise similar episodes. The estimated elasticity reflects this transmission mechanism across diverse policy regimes.

The policy dependence means our coefficient captures an **average effect** across countries with different institutions and policy regimes. Corporate retention rates, fiscal absorption propensities, and household saving behavior vary across economies. The elasticity of 0.28 is not a universal constant but rather the typical response. Even so, its stability across 42 countries and eight five-year periods demonstrates that the profitability mechanism is a robust feature of economies exporting under dominant-currency pricing.

6.7 Summary: Multiple Lines of Evidence

Five complementary lines of evidence validate the profitability mechanism linking local-currency export income to national saving:

1. Out-of-sample prediction. A coefficient estimated from 41 countries predicts China's ten-percentage-point saving surge and subsequent reversal to within 0.3 percentage points. This precision rules out China-specific explanations based on institutions, demographics, or financial structure.

2. Natural experiment. Argentina's 2002 devaluation generated an immediate, exogenous surge in local-currency export income followed by a contemporaneous doubling of the saving rate. The shock was clearly independent of saving behavior yet produced exactly the response the mechanism predicts.

3. Comparative policy episodes. Peru and Brazil faced identical external commodity booms but adopted divergent exchange-rate and fiscal policies. Peru's stable exchange rate and fiscal restraint preserved profitability and generated high saving; Brazil's appreciation and fiscal expansion transferred the windfall to consumers, leaving saving nearly unchanged.

4. Differential responses to export income measures. Saving responds strongly to local-currency export income but weakly to dollar export income. When both enter jointly, only X^{LC} remains significant. This asymmetry validates the profitability channel: what matters is domestic

purchasing power, not the world-market value of exports.

5. Contemporaneous timing. Export income and saving move together within five-year periods with no lags. This timing rules out reverse causality through investment and capacity expansion, which would require multi-year lags between saving and export growth.

Each piece of evidence addresses a distinct identification concern—specification bias, endogeneity, omitted variables, or timing—and together they form a consistent picture. Under dominant-currency pricing, exchange-rate and fiscal policies jointly determine how global export shocks affect domestic profitability, and profitability dynamics drive medium-term movements in national saving.

This mechanism helps explain major unresolved macroeconomic phenomena: the global saving glut of the 2000s, the divergent growth paths of East Asia and Latin America, and the sensitivity of saving and current accounts to commodity price cycles. It clarifies that under dollar invoicing, exchange rates matter not primarily through competitiveness and expenditure switching, but through the distribution of purchasing power between producers and consumers. That distribution determines who captures the export windfall—and, through differing saving propensities, the aggregate saving response that shapes global imbalances.

7 The Global Saving Glut and Structural Transformation

The profitability channel developed here offers a new interpretation of two central macroeconomic debates of the past two decades.

First, it reframes the *global saving glut* (Bernanke, 2005) not as a puzzle of excess thrift but as the aggregate outcome of profitability dynamics under DCP. In East Asia, stable real exchange rates during the 2000s allowed exporters to retain most of the dollar-value gains from expanding trade. Corporate profits and retained earnings rose sharply, driving national saving and current-account surpluses. In contrast, Latin American economies experiencing large real appreciations transferred part of their export windfalls to domestic consumers, producing weaker saving and external deficits. The apparent global imbalance between "excess savers" and "excess spenders" thus reflected differences in exchange-rate pass-through to *local-currency profitability*, not in underlying preferences or fiscal stances. From this perspective, the saving glut was the mirror image of asymmetric exchange-rate regimes interacting with dollar invoicing.

The terms-of-trade puzzle discussed in the introduction finds its resolution

here. The 2000s commodity boom delivered similar dollar-price windfalls to commodity exporters across regions, yet saving responses diverged sharply. This heterogeneity, long attributed to differences in shock persistence expectations or institutional quality, reflects the mechanism documented in this paper: economies where real exchange rates remained stable—such as Peru and the East Asian manufacturing exporters—saw windfalls pass through to producer margins and saving, while economies experiencing large appreciations—such as Brazil—transferred much of the windfall to consumers. The apparent instability of the terms-of-trade–saving relationship is not instability at all; it is the predictable consequence of heterogeneous exchange-rate behavior under dominant-currency pricing.

Second, the same mechanism connects to the literature on *structural transformation and growth*. Classic models (e.g., Rodrik, 2008, Restuccia and Rogerson, 2017) emphasize the importance of maintaining competitiveness in tradables for sustained industrialization. The framework here extends that view: under DCP, it is not competitiveness in relative prices that matters most but *profitability in local-currency terms*. Real-exchange-rate stability protects exporters' margins, finances reinvestment, and allows the tradable sector to expand through internal funds rather than external borrowing. Economies that achieve such stability—China and Peru in the 2000s, Korea in the 1980s—undergo continuous upgrading of tradables; those that do not experience premature de-industrialization. In this sense, DCP transforms the real-exchange-rate–growth nexus into a *profitability–saving–investment* nexus, linking the global pattern of imbalances to the domestic process of structural transformation.

8 Conclusion

Under dominant-currency pricing, exchange-rate movements shape far more than short-term trade dynamics. By redistributing export income between producers and consumers, they affect profitability, saving, and investment, with implications for the pace and pattern of growth. Across countries and decades, higher real local-currency export income is consistently associated with higher national saving, reflecting stronger corporate and fiscal balance sheets. This profitability–saving link helps interpret China's early-2000s surge and its later moderation, as well as the contrasting trajectories of Peru and Brazil.

The evidence points to a common mechanism behind global imbalances, saving booms, and export-led growth: profitability shocks under dominant-currency pricing. Real depreciations and export-price increases raise local-currency export income, strengthen profits, and are associated with higher saving and investment. Appreciations or export-price declines work in the opposite direction, compressing margins and weakening the saving response. China's post-2007 appreciation, Argentina's post-2002 depreciation, and the diverging paths of Peru and Brazil illustrate how movements in the real exchange rate shape the pass-through from external windfalls to domestic profitability and absorption.

A final clarification is important. This paper does not take a stand on the origins of real-exchange-rate movements themselves, which are shaped by policy choices and structural features such as foreign-exchange intervention, wage-setting institutions, fiscal positions, and capital flows. The analysis instead focuses on the profitability channel through which observed real-exchange-rate paths transmit into corporate saving, investment, and medium-run outcomes.

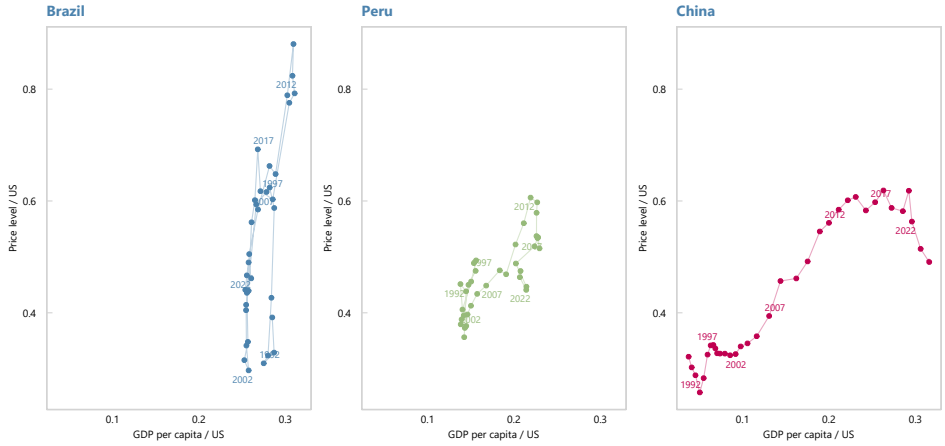
Exchange rates thus act as allocation mechanisms—governing who captures export windfalls and, through differing saving propensities, shaping macroeconomic outcomes. When fiscal outcomes and real-exchange-rate paths allow profitability to rise with external conditions, export gains are more likely to translate into higher saving and investment; when appreciation and domestic absorption dominate, the windfall is more likely to be spent rather than saved.

The same profitability dynamics also clarify why some export booms yield lasting structural change while others fade. When real exchange rates are relatively stable, retained earnings can rise with external conditions, supporting investment in tradables and capacity expansion. When appreciations are large, income shifts toward consumers and nontradables and tradable

margins are compressed, weakening incentives to reinvest. The pattern shown in Figure 8.1—linking relative GDP per capita and relative price levels for China, Peru, and Brazil—is consistent with this mechanism: economies with more stable relative prices experienced more sustained income gains, while economies with larger appreciations experienced weaker subsequent performance.

In this sense, the forces that produced the global saving glut also helped shape the geography of convergence. By linking dominant-currency pricing to medium-term accumulation, this framework bridges open-economy macroeconomics and growth theory: exchange rates are not only relative prices but a key determinant of how economies transform export windfalls into saving, investment, and structural transformation.

Figure 8.1. Relative GDP per capita vs Relative Price Level



Sources: World Bank

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A Data and Construction of Core Variables

This appendix describes the data sources and the construction of the core variables used in the empirical analysis. The purpose is to document measurement choices and clarify accounting relationships; the economic interpretation of these variables is discussed in the main text.

A.1 Data sources

The empirical analysis draws on annual data from national accounts and international databases, including the UN *National Accounts* and the World Bank's *World Development Indicators* (WDI). These sources provide consistent time series on exports, consumption, GDP, prices, exchange rates, and population for the economies examined in the empirical sections.

We obtain exports, consumption, and GDP from the UN *National Accounts* in both local currency and U.S. dollars, and in both nominal and constant (real) terms. Population data are taken from the WDI. The sources for additional variables used in specific sections and figures are listed separately in Appendix B.

A.2 Prices and deflators

Consumer price indices (CPIs) are constructed as the ratio of nominal to constant consumer expenditure from the UN *National Accounts*. Export price indices are derived analogously as the ratio of nominal to real exports. The U.S. CPI, P_t^{US}, is constructed in the same way.

A.3 Export income measures

Real local-currency export income is defined as nominal export income in local currency deflated by the domestic CPI, and real dollar export income as nominal export income in U.S. dollars deflated by the U.S. CPI:

$$X_t^{LC} = \frac{X_t^{LC,nom}}{P_t}, \tag{A.1}$$

$$X_t^{USD} = \frac{X_t^{USD,nom}}{P_t^{US}}, \tag{A.2}$$

where P_t and P_t^{US} denote the domestic and U.S. consumer price indices, respectively.

Finally, per-capita export income is computed by dividing X_t^{LC} and X_t^{USD} by population, as reported in the WDI.

A.4 Exchange rates

The nominal exchange rate S_t (domestic currency per U.S. dollar) is derived as the ratio of nominal GDP in local currency to nominal GDP in U.S. dollars:

$$S_t = \frac{GDP_t^{LC,nom}}{GDP_t^{USD,nom}}. \tag{A.3}$$

The CPI-based real exchange rate is then defined as[5]

$$R_t = S_t \frac{P_t^{US}}{P_t}. \tag{A.4}$$

[5]Strictly speaking, given construction from consumption expenditure, this corresponds to a consumption-deflator-based real exchange rate.

B Additional Data Sources and Series Codes

Table B.1: Additional data sources and series codes

Appears in	**Variable**	**Source**	**Series / Code**
4.4	General government revenue and expenditure	IMF, WEO database	–
4.5	General government balance, primary balance and debt	IMF, WEO database	–
4.8	Real investment	United Nations, National Accounts	–
4.9	Profits of industrial enterprises (China)	Haver	A924FNIN@EMERGEPR
5.1	Saving-to-GDP ratio	World Bank (WDI)	NY.GDS.TOTL.ZS
5.3	Saving, non-financial corporate sector (China)	CEIC	–
5.3	Profits, non-financial corporate sector (China)	CEIC	Saving + distributed income + income tax
5.4	Sectoral saving-to-GDP ratios (China)	CEIC	–
6.2	Investment-to-GDP ratio	World Bank (WDI)	NE.GDI.TOTL.ZS
8.1	GDP per capita, PPP (relative to U.S.)	World Bank (WDI)	NY.GDP.PCAP.PP.KD
8.1	Price level (relative to U.S.)	World Bank (WDI)	PA.NUS.PPPC.RF
A1	Exports: agriculture (Brazil)	Haver	N223IXMN@EMERGELA
A1	Exports: mining (Brazil)	Haver	N223IXAG@EMERGELA
A1	Exports: manufacturing (Brazil)	Haver	N223IXMD@EMERGELA
A2	Vehicle production (Brazil)	Haver	H223OMVU@EMERGELA
A2	Vehicle exports (Brazil)	Haver	H223XMVU@EMERGELA
A2	Imported vehicle registrations (Brazil)	Haver	H223VRTM@EMERGELA
A2	Domestic vehicle registrations (Brazil)	Haver	H223VRTD@EMERGELA
A2	Total vehicle registrations (Brazil)	Haver	H223CVRT@EMERGELA
A3	Merchandise exports (Peru)	Haver	N293IXD@EMERGELA
A3	Copper exports (Peru)	Haver	N293IXJN@EMERGELA
A3	Gold exports (Peru)	Haver	N293IX99@EMERGELA
D1	Share of foreign value added in exports	OECD TiVA (2025 edition)	–

C List of countries included

The regressions in section 5 include the following countries:
Africa: Egypt, Morocco, South Africa.
Asia: Bangladesh, China, India, Indonesia, Israel, Japan, Pakistan, Philippines, Korea, Thailand, Turkey.
Europe: Austria, Belgium, Czechia, Denmark, Finland, France, Germany, Greece, Italy, Netherlands, Poland, Portugal, Romania, Spain, Sweden, Switzerland, United Kingdom.
North America: Canada, Mexico, United States.
Oceania: Australia, New Zealand.
South America: Argentina, Brazil, Chile, Colombia, Peru.

D The Profitability Channel under Dominant-Currency Pricing

This annex clarifies why the relationship between export booms and saving emphasized in the main text is not an artifact of national-accounts identities. Under dominant-currency pricing (DCP), exports from emerging markets are typically priced in dollars, so exporters receive dollar revenues determined by export quantities and the world price in dollars. When export volumes surge or world-market prices in dollars rise, firms earn more dollar revenue. Whether this dollar windfall translates into higher *real local-currency* income and profitability depends on exchange-rate behavior. If the exchange rate is stable, additional dollar receipts translate largely one-for-one into higher local-currency export income and wider margins. If the exchange rate appreciates, the same dollar receipts convert into fewer units of local currency, so local-currency profitability rises much less. Since export surges are often accompanied by appreciation, the strength of the profitability effect depends systematically on exchange-rate movements. In this sense, the exchange rate functions as a *distribution mechanism*, allocating export windfalls between exporters—who gain through wider margins when the exchange rate is stable—and consumers—who gain through cheaper imports when the exchange rate appreciates. This distributional role is specific to dollar invoicing; under other invoicing regimes, exchange-rate movements tend to operate through quantities or bilateral pass-through rather than through exporter margins.

This channel matters for saving because firms and households have different saving propensities. Exporting firms typically save a large share of additional income through retained earnings, while households consume a larger share of any income gain. When the exchange rate is stable during a dollar export boom, the boom shifts income toward high-saving firms, raising the national saving rate. When the exchange rate appreciates, a larger share of the windfall is transferred to low-saving consumers, producing a weaker saving response. Importantly, this mechanism concerns the *saving rate*, not merely the level of saving: national-income identities govern levels, but they do not generate systematic co-movement between changes in the saving rate and changes in exporters' local-currency profitability.

The profitability mechanism is also distinctive to DCP relative to alternative pricing paradigms. Under producer-currency pricing (PCP), exports are priced in the exporter's own currency. An appreciation raises the foreign-currency price of exports, reducing competitiveness and lowering export volumes; adjustment occurs primarily through quantities rather than mar-

gins. Under PCP, a depreciation tends to stimulate export volumes, whereas under DCP it tends to boost margins and retained earnings. Under local-currency pricing (LCP) in destination markets, pass-through into domestic profitability would depend on bilateral exchange-rate movements and would not be anchored in the dollar. The empirical pattern emphasized in the main text—that saving tracks real local-currency export income rather than dollar export receipts—is therefore naturally interpreted as evidence for a DCP profitability channel: exchange-rate movements during export booms compress or amplify the pass-through from dollar receipts into local-currency profitability.

Finally, while the initial impact of a profitability shock is concentrated in the export sector, its effects need not remain confined there. Higher margins raise corporate saving directly through retained earnings and may also affect other sectors through employment, wages, and spillovers from export-oriented activity. Moreover, fiscal policy can influence how much of the windfall is saved versus absorbed, for example through the extent to which additional tax revenues are saved or spent. These considerations help interpret cross-country heterogeneity around the baseline relationship documented in the empirical sections, without altering the core mechanism: under DCP, exchange-rate behavior governs how dollar export windfalls translate into domestic profitability and thus into saving.

E Dutch Disease as a Profitability Mechanism under Dominant-Currency Pricing

Conceptual link. Under dominant-currency pricing (DCP), export prices are sticky in dollars, so real-exchange-rate movements primarily affect exporters' local-currency profitability rather than export quantities. The same profitability channel that links exchange rates to aggregate saving and investment also helps interpret sectoral reallocations often described as "Dutch disease."

Real appreciation compresses exporters' local-currency margins, weakening investment incentives in tradables and shifting activity toward nontradables. Conversely, a relatively stable or more competitive real exchange rate limits margin compression in tradables, supporting capacity growth. In this sense, "Dutch disease" can be viewed as the profitability channel operating at the sectoral rather than the aggregate level.

Brazil: appreciation and deindustrialization. During the 2000s commodity boom, Brazil's real exchange rate appreciated sharply. While dollar export prices rose, the appreciation reduced the local- currency value of export revenues and compressed margins in tradables.

- **Profitability:** Manufacturing exporters faced weaker local-currency margins despite booming world prices.
- **Sectoral outcomes:** Manufacturing's share in total exports fell from about 85 percent in the early 2000s to around 50 percent by the 2020s, with steep declines in autos and machinery.
- **Interpretation:** The appreciation shifted part of the commodity windfall toward domestic purchasing power and absorption, while eroding profitability and investment incentives in manufacturing.

Peru: relative stability and broad-based export growth. Peru provides a useful contrast. Despite large increases in copper and gold prices, its real exchange rate moved more moderately.

- **Profitability:** Real local-currency export income increased alongside dollar export prices, limiting margin compression in tradables.
- **Sectoral outcomes:** Manufacturing and agricultural exports continued to expand, while mining investment surged.

- **Interpretation:** With more moderate real-exchange-rate movements, tradable profitability remained comparatively stronger, supporting continued investment—including in non-resource tradables.

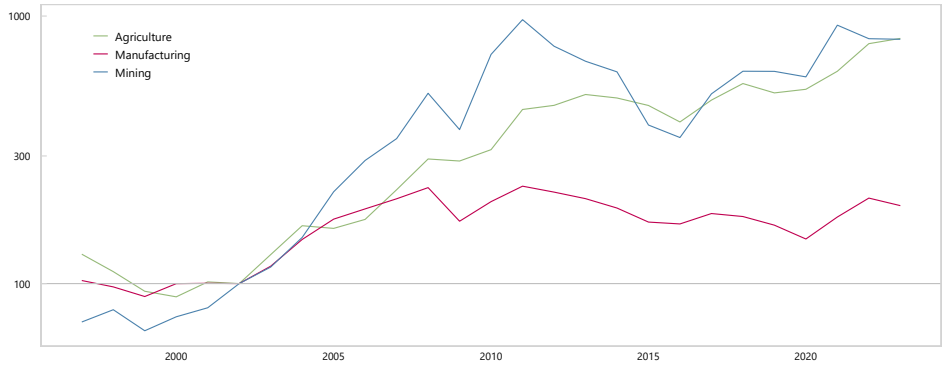
Synthesis. The Brazil–Peru comparison illustrates that, under DCP, "Dutch disease" need not be a separate mechanism: it is a sectoral manifestation of the same profitability channel that links export booms to saving and investment. Larger appreciations compress local-currency margins in tradables and can be associated with deindustrialization and weaker tradable investment. More moderate real-exchange-rate movements limit this margin compression and can support broader-based export growth.

Note: Figures E1–E3 illustrate how real-exchange-rate movements affect sectoral profitability. In Brazil, appreciation reduced the pass-through from dollar export prices to local-currency export income and manufacturing activity; in Peru, more moderate movements preserved profitability and were associated with broader-based export growth.

Figure E.1. Brazil: Dutch Disease

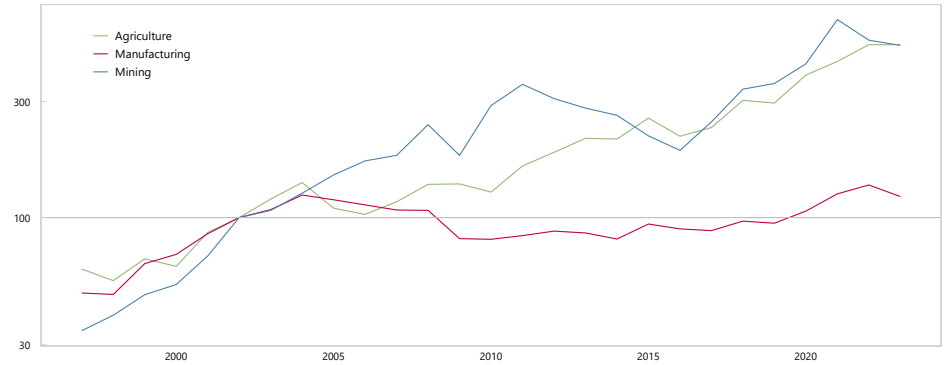
Per Capita Export Receipts in US dollars, deflated by US CPI

(Index, 2002=100)



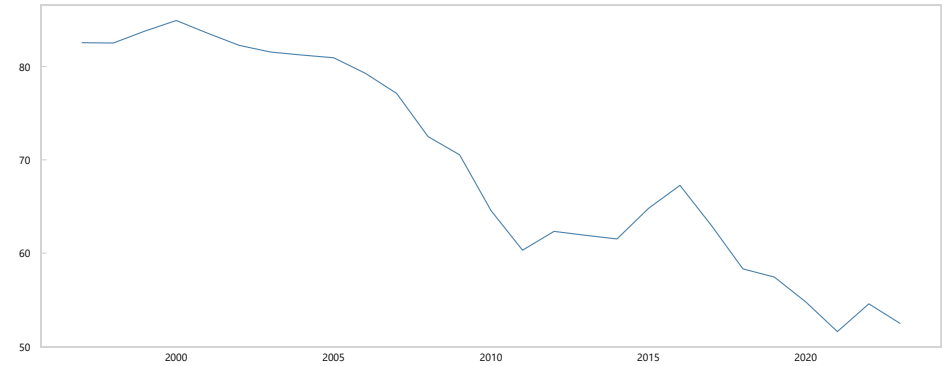
Per Capita Export Receipts in local currency, deflated by CPI

(Index, 2002=100)



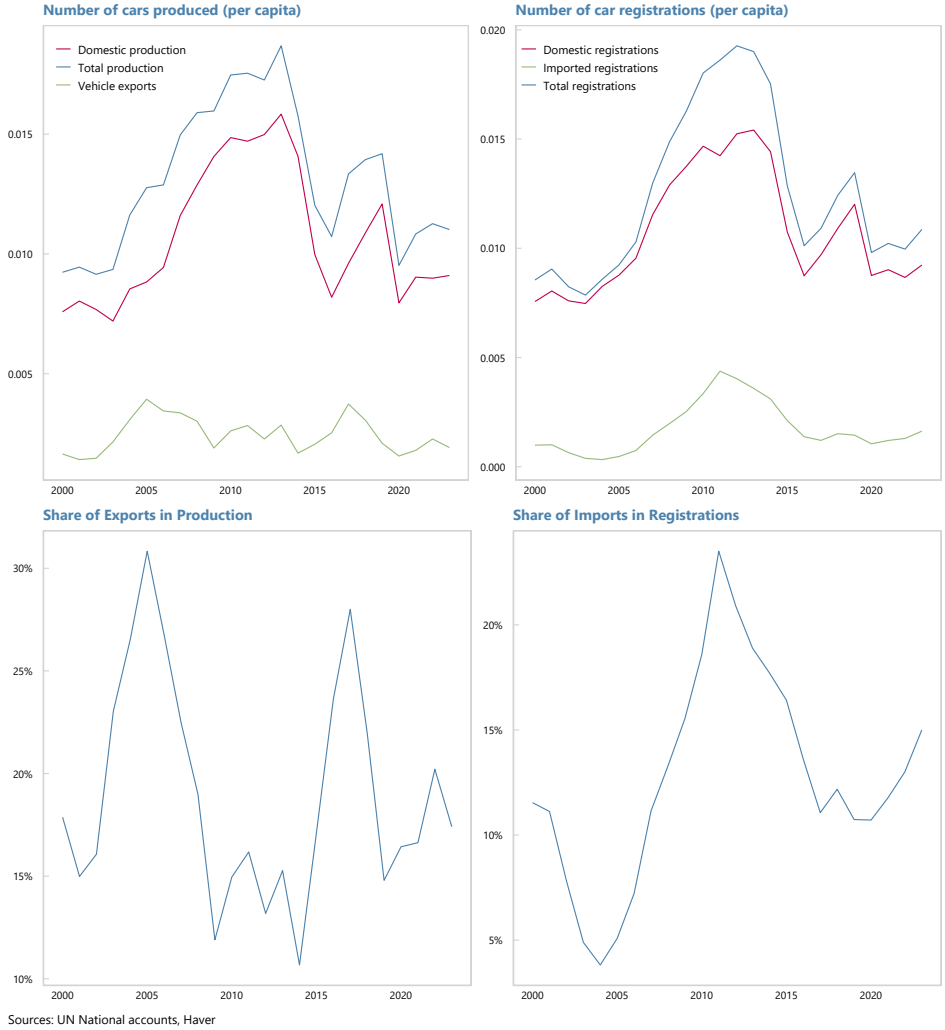
Share of manufacturing in exports

(Percent



Sources: UN National accounts, Haver

Figure E.2. Brazil: Car Production and Sales

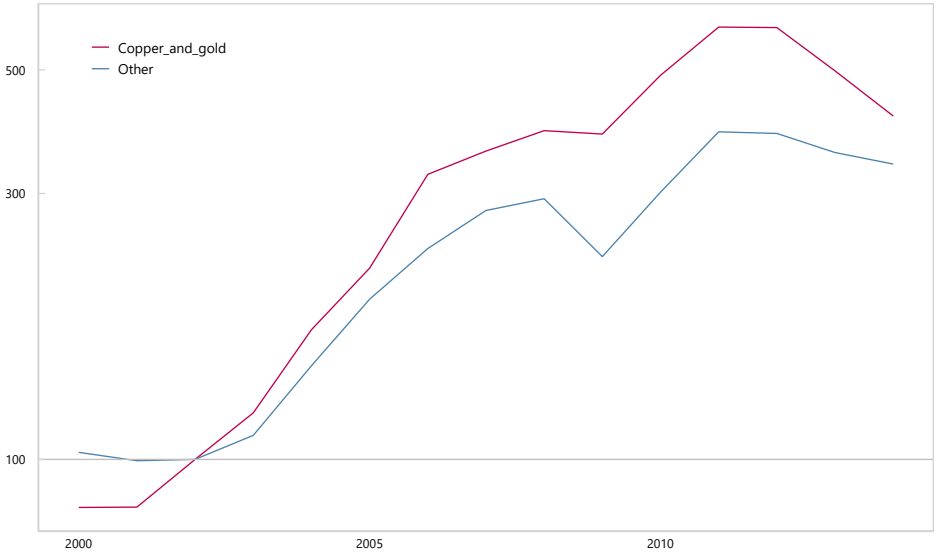


Sources: UN National accounts, Haver

Figure E.3. Peru: Absence of Dutch Disease

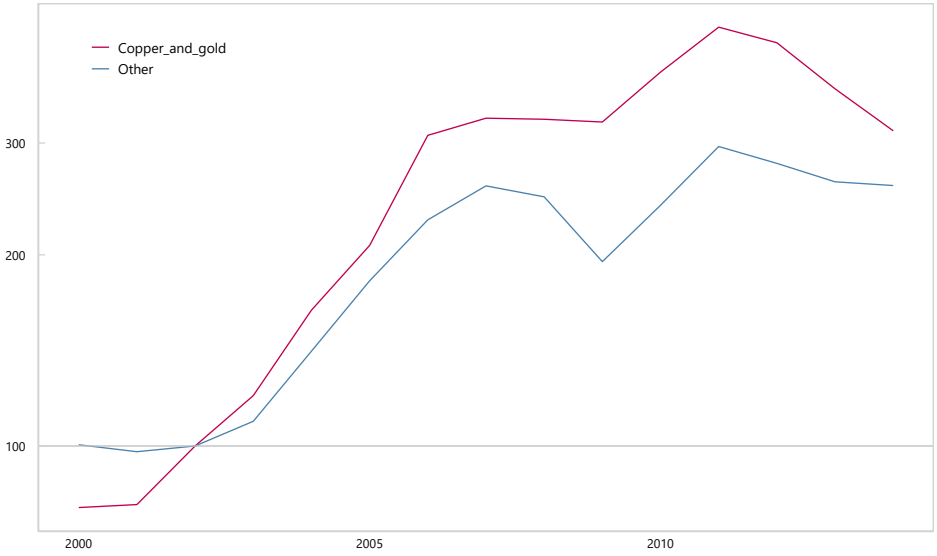
Per Capita Export Receipts in US dollars, deflated by US CPI

(Index, 2002=100)



Per Capita Export Receipts in local currency, deflated by CPI

(Index, 2002=100)



Sources: UN National accounts, Haver

F Alternative Explanations for China's Saving Surge

China's national saving-to-GDP ratio rose sharply in the early 2000s and then declined after 2007. Structural explanations—financial repression, the dominance of state-owned enterprises (SOEs), and limited social safety nets—may help account for China's *level* of saving, but they cannot explain the *timing* of the surge and subsequent reversal.

Financial repression. Between 2000 and 2007, the key features of financial repression changed little. Interest-rate liberalization stalled after 2004, and the banking system continued to channel credit through state-controlled institutions. As Xu and Faure (2019) note, the period was characterized by stability in key repressive features—low, regulated deposit rates and directed lending. These slow-moving institutional conditions are inconsistent with the rapid run-up in saving during 2000–2007.

State-owned enterprises. The relative importance of SOEs did not rise over this period. Following the late-1990s restructuring, the state's ownership presence was consolidated rather than expanded. The establishment of the State-owned Assets Supervision and Administration Commission (SASAC) in 2003 unified existing ownership rather than enlarging it. As shown by Lin et al. (2020), the SOE share in output and assets remained broadly stable, indicating that ownership patterns cannot account for the sharp, temporary increase in national saving.

Social safety nets. Coverage expanded rather than contracted in the 2000s. Social insurance and assistance programs broadened beyond urban formal employees to include non-employees and rural residents. As Gao et al. (2017) show, reforms between 2002 and 2007 marked the beginning of a more inclusive welfare system. An erosion of safety nets therefore cannot explain the timing of the saving surge.

Profitability channel (DCP). By contrast, the mechanism in the main text operates through exporters' local-currency profitability under dominant-currency pricing (DCP). With a broadly stable exchange rate in the early 2000s and rising dollar export prices, local-currency export income—and therefore corporate profits and retained earnings—surged, lifting national saving. After 2007, real appreciation compressed margins and saving fell.

This mechanism matches both the speed and the magnitude of the observed movements in saving.

Cross-country validation. Panel evidence across 42 economies shows that five-year changes in real local-currency export income systematically predict five-year changes in national saving rates, while dollar-measured export income and real GDP growth have much weaker explanatory power. Excluding China from the estimation yields an out-of-sample prediction that closely reproduces China's 2002–07 saving surge and its 2007–12 reversal.

Conclusion. Structural factors can help explain why China's saving rate is high, but they are too inert to account for the sharp cycle in the 2000s. The DCP profitability channel—which responds immediately to exchange-rate movements—explains both the timing and the magnitude of China's saving surge and subsequent decline.

G Robustness: Adjusting for Imported-Input Intensity

This annex verifies that the main results are not driven by the exclusion of high–foreign-value-added economies and remain robust when accounting explicitly for imported-input intensity. Panel regressions are first re-estimated for the smaller number of years for which data on the domestic-value-added (DVA) share in exports are available (Table G.1).[6] The coefficients are virtually identical to those in the baseline full-sample regression, indicating that the main relationship is not sensitive to the smaller sample.

Table G.2 then introduces adjusted regressors that multiply the growth of local-currency and dollar export income by the DVA share in exports, allowing the inclusion of Hungary, Malaysia and Slovakia. The coefficient on DVA-weighted local-currency export income is mechanically larger because scaling by a ratio between zero and one reduces the variance of the regressor. The economic result is unchanged: saving responds to the portion of export income accruing to domestic producers.

[6] Data on the share of foreign value added in gross exports are available from the OECD for the years 1995-2022.

Table G.1: Determinants of 5-Year Changes in the Saving-to-GDP Ratio
(unadjusted variables, restricted sample, excluding HUN, MYS, SVK)

	Dependent variable:					
	Δ_5 (Saving / GDP)					
	LC only	USD only	GDP only	LC + USD	LC + GDP	All
	(1)	(2)	(3)	(4)	(5)	(6)
Δ_5 Local-currency export income	0.253***			0.256***	0.239***	0.250***
	(0.024)			(0.033)	(0.026)	(0.033)
Δ_5 Dollar export income		0.097***		−0.003		−0.012
		(0.016)		(0.019)		(0.020)
Δ_5 Real GDP per capita (USD)			0.085***		0.024	0.027
			(0.018)		(0.017)	(0.018)
Constant	−1.892***	−0.634**	−0.811***	−1.895***	−2.061***	−2.093***
	(0.272)	(0.248)	(0.304)	(0.273)	(0.296)	(0.301)
Observations	245	245	245	245	245	245
R^2	0.313	0.137	0.084	0.313	0.319	0.320
Adjusted R^2	0.310	0.133	0.080	0.307	0.313	0.311

*p<0.1; **p<0.05; ***p<0.01

Table G.2: Determinants of 5-Year Changes in the Saving-to-GDP Ratio, full sample, using DVA-weighted variables

	Dependent variable:				
	Δ_5 (Saving / GDP)				
	LC only	USD only	GDP only	LC + USD	LC + GDP
	(1)	(2)	(3)	(4)	(5)
DVA share * Δ_5 Local-currency export income	0.327***			0.328***	0.317***
	(0.029)			(0.039)	(0.032)
DVA share * Δ_5 Dollar export income		0.135***		−0.001	
		(0.020)		(0.024)	
Δ_5 Real GDP per capita			0.085***		0.013
			(0.018)		(0.017)
Constant	−1.969***	−0.718***	−0.805***	−1.969***	−2.055***
	(0.263)	(0.247)	(0.305)	(0.264)	(0.287)
Observations	257	257	257	257	257
R^2	0.340	0.153	0.080	0.340	0.342
Adjusted R^2	0.338	0.149	0.076	0.335	0.336

*p<0.1; **p<0.05; ***p<0.01