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THE CHINESE CURRENT ACCOUNT IMBALANCES:
PUZZLES, PATTERNS, AND POSSIBLE CAUSES

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ABSTRACT

China's large current account surplus has been an irritant to its trading partners. While industrial and trade policies often lead to sector-level imbalances, they play a relatively limited role in the economy-wide surplus. Structural factors such as an unbalanced sex ratio and uneven access to financing by state-owned and non-state firms are more important determinants of the current account imbalance. While macroeconomic stimulus can boost imports and reduce the surplus in the short run, any long-term solution would need to involve reforms aiming at addressing the structural problems.

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1 Introduction

China has switched from being one of the world's largest current account deficit countries in US dollar terms for some years in the 1980s to the largest surplus country in the 21st century. The size of the surplus has attracted global media and political attention and is considered a key part of what is known as global (current account imbalances). As a share of its GDP, China's current account surplus peaked in 2007 (at 9.8%) and has since shrunk to about 2%. Because China is the largest economy in PPP terms or the second largest economy in nominal dollar terms, even 2% of its GDP is a very large number in absolute term.

It is important to note that, since China has been growing faster than most of its large trading partners, even if China's trade surplus grows slightly less fast than its own GDP, its bilateral surplus against a given trading partner (think of Europe) could still rise as a share of its trading partner's total imports or GDP.¹ Furthermore, because of uneven distribution of China's imports and exports across trading partners, some partner countries may see a rise of China's share in their imports without a corresponding rise of its share in their exports, even if China's aggregate imports and exports increase at a similar speed.

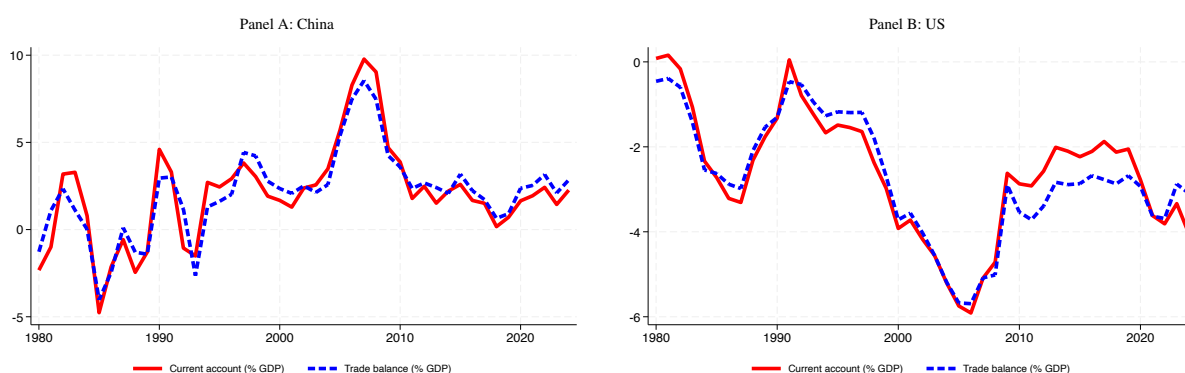
This paper addresses four related sets of questions. First, how big are the Chinese current account surpluses in recent years? Do the official statistics understate the true size of the current account surpluses? Second, what are the roles of industrial and trade policies in the country's current account surpluses? Third, what are the roles of structural factors such as the demographics and financial underdevelopment? Fourth, what are the roles of other factors, such as the housing market slump and exchange rate policy?

The Chinese current account balance-to-GDP ratio has exhibited interesting dynamics since

¹Huang (2026) makes a similar point. Even if China's current account or trade surplus stays at 2% of its GDP, it may still pose significant challenges for its trading partners.

1980 (see Figure 1). In the 1980s, the ratio was low and even negative, averaging around -0.73% of GDP. During the 1990s, it began to increase, reaching 2.22% of GDP on average. After China's accession to the WTO, the current account balance peaked in the 2000s, with an average of 4.89% of GDP and a peak of around 10% of GDP in 2007. This is a period of heated debate on China's contribution to the global imbalances (Bernanke 2005, Obstfeld 2025). Following the global financial crisis, the ratio started to decline, with a ten-year average of 1.85% between 2010 and 2019. As of 2024, China's current account-to-GDP ratio stands at 2.26% . According to IMF forecasts, this declining trend is expected to continue, with the ratio projected to average 1.78% over 2020–2030 based on the April 2025 edition of the *IMF World Economic Outlook*. Thus, China's current account balance is expected to fluctuate around 2% in the medium run.

Figure 1 CURRENT ACCOUNT (IN GDP, %): CHINA VS. U.S.



NOTE. The figure shows the current account balance and trade balance as a percentage of GDP for China and the U.S., from 1980 to 2024. The data are taken from the *IMF World Economic Outlook*, October 2025 edition, and the World Development Indicators.

A mirror image of China's current account surplus is the U.S. deficit. The U.S. current account-to-GDP ratio has been negative in most years since 1980, reaching its largest deficit of -6% in 2006. Although the deficit has narrowed since the global financial crisis, it remains sizable. As of 2024, it stands at -3.88% and is projected to reach -2.4% in 2030 according to the *IMF World Economic*

Outlook. Because China and the United States are the world’s two largest economies, their current account imbalances have attracted substantial global attention.

The first set of questions concerns the true size of China’s current account surplus. Recently, China’s official trade balance statistics adopted a new methodology following IMF guidelines, which has raised concerns about the reliability of official data in measuring the true size of the surplus (Setser 2025b). Moreover, China’s net factor income remains negative even during a period of rising global interest rates. These issues have led to questions regarding the accuracy of China’s reported surplus figures. We will examine these concerns in detail.

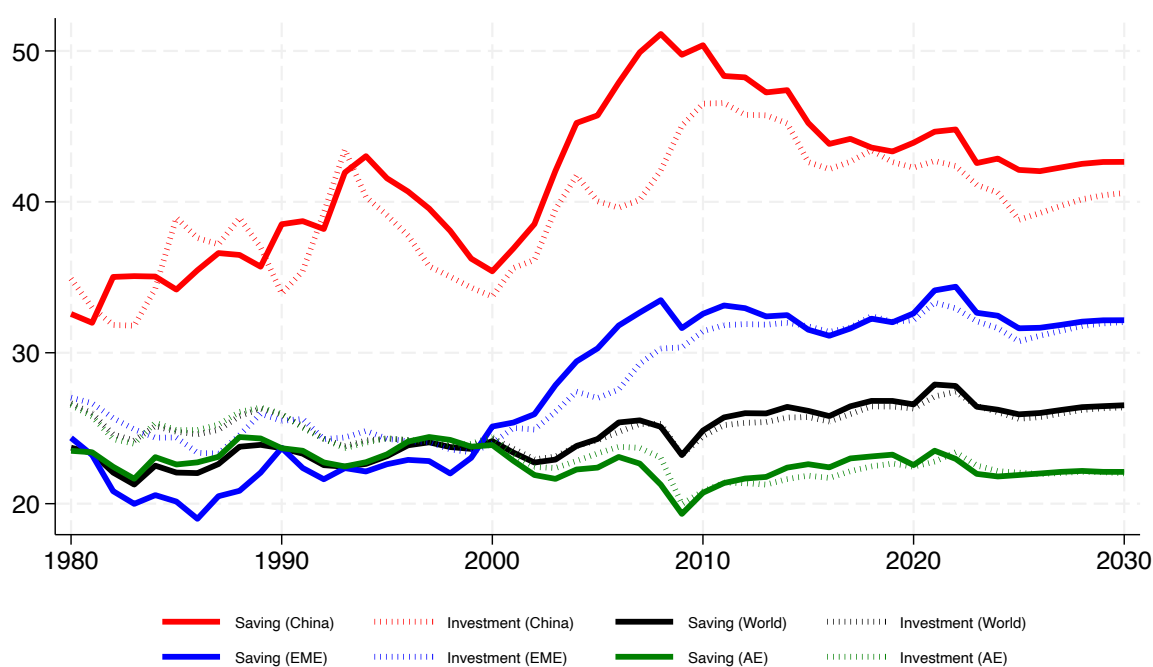
The second set of questions focuses on the role of industrial and trade policies in shaping China’s current account surplus, an issue closely linked to the broader U.S.–China trade dispute. Figure 1 provides a partial perspective: movements in the current account in both countries closely mirror changes in their trade balances. By definition, the current account equals the trade balance plus net factor income, and trade balances appear to be the dominant driver of current account dynamics in both economies. Consequently, debates surrounding China’s current account surplus are inherently intertwined with questions about industrial and trade policies—particularly whether such policies have distorted trade flows and contributed to persistent trade and current account imbalances. In addition, the recent U.S.–China trade war likely influenced the evolution of bilateral current account positions.

Structural factors have also played an important role in shaping China’s surplus. A distinctive feature of China’s current account position is that it coexists with exceptionally high levels of both savings and investment relative to GDP. Figure 2 compares China’s savings and investment rates with those of other country groups. China stands out clearly: its savings rate exceeds 40%, while the global average remains below 30%. Even relative to other emerging market economies—and certainly compared with advanced economies—China’s savings rate is markedly higher. A sub-

stantial literature explains China's high surplus by examining structural factors such as demographics and financial underdevelopment. We will analyze the roles of these factors in determining China's current account now and in the future.

Finally, we will also examine additional influences on China's surplus, including the recent slump in the real estate sector and exchange rate policies. We conclude the paper by discussing potential policy measures to reduce China's current account surplus.

Figure 2 CHINESE SAVING AND INVESTMENT (IN GDP, %)



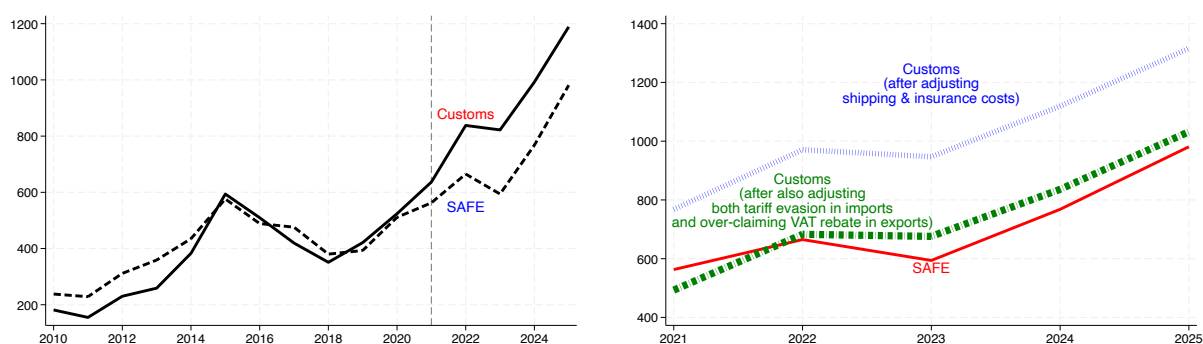
NOTE. The figure shows national savings and total investment as percentages of GDP, from 1980 to 2030. Data after 2024 are estimated by IMF staff. The data are taken from the IMF *World Economic Outlook*, October 2025 edition.

2 How Big is China's Current Account Surplus?

The current account balance is equal to the sum of the goods trade balance, the service trade balance, and the net factor payment. Concerns have been raised recently about the reliability with regard to the officially reported size of the trade balance and the primary income component of the net factor payment in recent years in China's official balance-of-payments data (Setser 2025b,a). We discuss each issue in turn.

2.1 The Size of the Trade Surplus

Figure 3 TRADE BALANCE: SAFE VS. CUSTOMS (IN BILLION USD)



NOTE. The figure displays China's trade balance data from the State Administration of Foreign Exchange (SAFE) and customs sources for the period 2010–2025. As the SAFE data for 2025 is only available for the first three quarters, we annualize the first three quarters' data using the average share of the first three quarters within the full year during 2022–2024 to estimate the annual data for 2025. Data source: WIND.

Goods trade surpluses are reported by both Chinese Customs and the State Administration of Foreign Exchange (SAFE), but the two agencies rely on different methodologies. As a result, the goods trade balance reported by SAFE is generally smaller than that reported by Customs. The discrepancy between the two series widened beginning in 2019 and appears to have continued to grow over time (left panel in Figure 3).

This widening gap coincided with a structural change in China’s data-collection and reporting process that took effect in 2022. Specifically, the goods trade component of China’s official balance of payments (BOP) statistics switched from Customs-based data to SAFE-based data. This methodological change resulted in a smaller reported goods trade surplus—and consequently a smaller current account surplus—by roughly \$300 billion. Although the switch was recommended by the IMF, [Setser \(2025a\)](#) expressed skepticism about the SAFE figures, prompting both SAFE and the IMF to issue clarifications ([Lardy and Huang 2025](#)).²

Table 1 ADJUST CUSTOMS IMPORT BY SHIPPING AND INSURANCE (IN BILLION USD)

	SAFE			Customs			Customs (adjusted)	
	X	M	X-M	X	M	X-M	M	X-M
2021	3216	2653	563	3316	2679	637	2548	768
2022	3347	2682	665	3544	2707	838	2574	971
2023	3179	2585	594	3379	2557	822	2432	947
2024	3409	2641	768	3576	2583	993	2457	1119
2025	3563	2582	981	3772	2583	1189	2456	1316

NOTE. The table displays China’s trade balance data from the balance of payments (BOP) and customs sources for the period 2021–2025. As the SAFE data for 2025 is only available for the first three quarters, we annualize the first three quarters’ data using the average share of the first three quarters within the full year during 2022–2024 to estimate the annual data for 2025. The last two columns adjust the Customs import data to account for shipping and insurance costs, which are estimated to average 4.9% according to [Fiallos et al. \(2024\)](#). Data source: WIND.

We now assess reasons for the data gap. We start with an uncontroversial adjustment. Because the value of imports recorded in the Customs includes shipping costs and transportation insurance (commonly known as CIF value), which are conceptually part of the service trade, we need to remove this part to obtain the value of goods imports (as recommended by the IMF). The Customs-recorded exports are on FOB basis, which are free of shipping and insurance costs. The SAFE-reported goods imports and exports have already been net of the shipping and insurance costs.

The shipping and insurance fees are about 4.9% of the import value globally ([Fiallos et al.](#)

²The data source is [SAFE \(2024H1\) Balance of Payments Report](#) and [IMF \(2024\) Article IV for China](#).

2024). We use this number to adjust the Customs-reported import values downward in Table 1. While such an adjustment should not alter the size of the overall current account balance (since it only moves the same value from the goods trade part to the service trade part), it does enlarge the goods trade balance using the Customs data. In the right panel of Figure 3, we report the Chinese trade balance both according to the Customs data (after adjusting for shipping and insurance) in the top blue dotted line and according to SAFE in the bottom red solid line.

What explains the gap in the trade balance in the two reporting sources? The IMF (2024) provides the following explanation based on the different statistical methodologies used by two Chinese agencies. Although both reflect the same nominal trade activity, they differ systematically, because SAFE measures trade in terms of monetary ownership transfers, whereas GACC tracks physical cross-border movements of goods. Consequently, the two series are not directly commensurate.

First, SAFE adheres to the IMF's *Balance of Payments and International Investment Position Manual, Sixth Edition* (BPM6), which is grounded in the change-of-ownership principle: a transaction is recorded once legal ownership has passed, regardless of whether the good physically crosses the border. By contrast, customs statistics follow the United Nations *International Merchandise Trade Statistics* framework, which records flows when goods physically enter or exit the customs territory, irrespective of ownership. In modern trade, where global value chains, processing trade, and trans-shipment are common, these two perspectives often diverge. SAFE provides four examples:

1. *Processing trade*. Under this model, raw materials enter China and final products exit. Customs records the full value of both, but since ownership remains with foreign entities, BOP does not record the trade. Instead, the processing fee is captured under BOP services.

2. *Global manufacturing arrangements*. Multinational firms outsource production to Chinese

firms yet retain ownership. If production occurs in China but goods are sold domestically without border crossing, customs records nothing. However, ownership may still transfer (factory → MNC → distributor), and these transfers are recorded in the BOP. Since the factory price (transfer) is usually lower than the wholesale price, this tends to reduce the BOP goods surplus. Profits from domestic sales are ultimately repatriated, entering BOP as investment income.

3. *Merchanting* (“*offshore trading*”), where goods never physically cross into China, but Chinese firms act as intermediaries in ownership transfers (buying from nonresidents and reselling to other nonresidents). Customs records zero, but the BOP records the net export based on ownership transfer.

4. *Cross-border warehousing and logistics*. Goods enter or exit China for storage or logistics, but ownership remains with nonresidents. While customs records the physical flows, the BOP records no goods trade because legal ownership does not change.

Second, BOP statistics record transactions at actual prices between residents and nonresidents, whereas customs statistics rely on declared customs values, which may diverge substantially.

However, [Setser \(2025b\)](#) argues that such an adjustment cannot be quantitatively very important. We believe an important source of the data gap not discussed by the IMF or Setser has to do with systematic mis-measurement in both imports and exports in the Customs data. In particular, importers may under-report the value of imports to evade import tariffs, and exporters may over-report the value of exports in order to over-claim VAT rebates. Importantly, both the incentive and the ability to misreport the trade values may have increased in recent years.

There are three broad approaches to evade tariffs ([Fisman and Wei 2004](#)): (a) under-reporting the unit value of the imports, (b) under-reporting the physical quantities of imports, and (c) misclassifying the goods type from a higher-tariffed category to a lower-tariffed one. The first two approaches would lead to under-reported import values in the Customs data. By the baseline

estimate in [Fisman and Wei \(2004\)](#), one percentage increase in the nominal tariff rate leads to a 3% under-reporting of the import values.

Beginning in the second half of 2018, China raised tariffs on U.S. imports in several rounds, mirroring the three waves of U.S. tariff increases on Chinese goods. Neither country made substantial adjustments to these nominal tariff levels during the Biden administration. Following the Trump administration, tariffs escalated further on both sides. According to [Bown \(2023\)](#), China’s average tariff on U.S. goods rose from 21.2% in 2021 to 31.9% in 2025, while its tariff on non-U.S. goods declined slightly from 6.6% to 6.5% over the same period.

Higher tariffs on U.S. imports increase the incentive for customs under-reporting of those imports, whereas reductions in China’s MFN tariff rates diminish the incentive to underreport imports from other countries. To account for these opposing forces, we adjust the reported import values using an elasticity of 3 from [Fisman and Wei \(2004\)](#). This elasticity implies that the under-reporting of U.S. imports increases by 32.1% ($=3 \times 10.7\%$), while under-reporting of imports from the rest of the world decreases by 0.3% ($=3 \times 0.1\%$). We therefore reduce the recorded imports from the United States and raise the recorded imports from the rest of the world accordingly. The adjusted numbers are presented in [Table 2](#).

Table 2 ADJUST CUSTOMS’ IMPORTS FOR TARIFF EVASION (IN BILLION USD)

	SAFE	Customs			Adjust M (Tax Evasion)				Adjust M (Shipping, Insurance and Tax Evasion)	
	X-M	X	M	X-M	M _{US}	M _{Non-US}	M	X-M	M	X-M
2021	563	3316	2679	637	180	2499	2757	559	2626	690
2022	665	3544	2707	838	178	2529	2783	761	2650	894
2023	594	3379	2557	822	164	2393	2627	752	2502	877
2024	768	3576	2583	993	164	2419	2654	922	2527	1049
2025	981	3772	2583	1189	140	2443	2642	1130	2515	1257

NOTE. The table displays China’s trade balance data from the balance of payments (BOP) and customs sources for the period 2021–2025. As the SAFE data for 2025 is only available for the first three quarters, we annualize the first three quarters’ data using the average share of the first three quarters within the full year during 2022–2024 to estimate the annual data for 2025. The last two columns adjust the Customs import data to account for shipping and insurance costs, which are estimated to average 4.9% according to [Fiallos et al. \(2024\)](#). Data source: WIND.

On the export side, Chinese exporting firms have an incentive to over-report the value of exports in order to claim larger VAT rebates. The strength of this incentive is not constant over time. In particular, the Chinese authorities typically rebate only a portion of the VAT revenue collected from exporters. In response to the Trump trade war, the authorities implemented two types of adjustments. First, the VAT rate for manufacturing exporters was reduced from 17% to 13%, which is likely to have boosted real exports; however, this change should not affect the reporting gap between SAFE and Customs. Second, the authorities progressively increased the share of VAT rebates returned to exporting firms over four waves. Together with the deteriorating financial health of firms caused by the trade war and domestic economic difficulties, this would have strengthened the incentive to over-report exports, thereby widening the reported goods trade balance between Customs and SAFE. The fact that rebate rates were raised in four waves suggests that this gap could have grown over time.

Using information from [Clark and Wong \(2021\)](#), Chinese net VAT rates on exports (defined as the gross VAT rate minus the export VAT rebate, hereafter “net VAT”) declined substantially between 2017 and 2020, as authorities reduced the gross VAT rate from 17% to 13% and raised export rebate rates in four successive rounds during the trade conflict. As a result, the average net VAT rate fell from nearly 7% at the end of 2017 to about 2.5% in 2020, while the share of export products facing a zero net VAT rate rose sharply from 5% of all goods in 2017 to roughly 50% in 2020. If VAT rebates increased by 4.5%, and if the elasticity of overreporting exports is comparable to the elasticity of under-reporting imports (which is 3 estimated by [Fisman and Wei 2004](#)), this implies roughly 13.5% over-reporting in customs export data. Given that this incentive applies to about half of China’s reported exports (which could claim a VAT rebate), we therefore adjust only that portion of exports, while keeping the other half unchanged in Table 3. In the right panel of Figure 3, the Customs trade balance data after applying all the adjustments become closer

to the SAFE-reported figures.

Table 3 ADJUST EXPORTS FOR OVER-CLAIMING VAT REBATE (IN BILLION USD)

	SAFE	Customs			Adjust X (Avoiding VAT)		All Adjustment
	X-M	X	M	X-M	X	X-M	X-M
2021	563	3316	2679	637	3119	439	493
2022	665	3544	2707	838	3334	627	683
2023	594	3379	2557	822	3178	621	676
2024	768	3576	2583	993	3363	780	836
2025	981	3772	2583	1189	3548	965	1032

NOTE. The table reports China’s trade balance data from both the balance of payments (BOP) and Customs sources for the period 2021–2025. As the SAFE data for 2025 is only available for the first three quarters, we annualize the first three quarters’ data using the average share of the first three quarters within the full year during 2022–2024 to estimate the annual data for 2025. Columns six and seven adjust the Customs export data to account for firms’ incentives to overreport exports in order to claim higher VAT rebates. The final column adjusts both imports and exports to account for shipping and insurance costs, tax evasion, and VAT-related over-reporting.

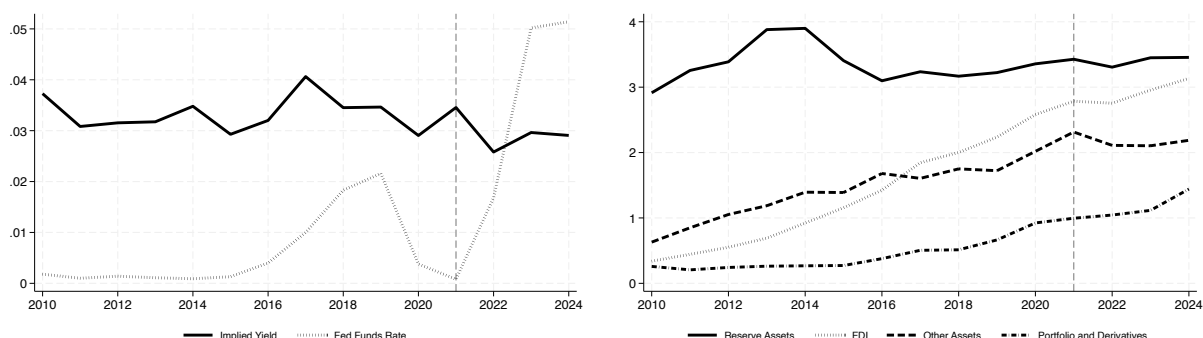
The remaining gap could potentially be due to the processing trade and “factory-less” production that the **IMF (2024)** cited. Recall Setser’s assertion that the adjustment from “factory-less” production is not quantitatively big. The discussion above suggests that one may not need a big adjustment from this factor to close the gap between the Customs and SAFE reported goods trade balance.

In sum, one cannot reject the null that the SAFE and Customs reported goods trade balance numbers are compatible to each other once one adjusts for potential over-reporting of the exports and under-reporting of the imports in the Customs data and the different methods used by the two agencies in tracking goods flows by “factory-less” production through bonded warehouses.

2.2 The Sign and the Size of the Primary Income

In spite of China’s large gross foreign asset position, the country reports a negative earnings on the order of 125 million dollars in recent years. This seems surprising in an environment in which the

Figure 4 PRIMARY INCOME YIELDS AND EXTERNAL ASSETS



NOTE. The left panel plots China’s primary-income yield—measured as primary-income credit divided by the lagged stock of total foreign assets—alongside the average federal funds rate from 2010 to 2024. The right panel shows the composition of China’s foreign assets, including reserve assets, FDI, other assets, and portfolio assets plus derivatives, over the same period. Data sources: SAFE and FRED.

return on US government bonds has risen in recent issues.

This issue has been highlighted in the IMF’s 2025 External Sector Report. Since the global rise in interest rates beginning in 2021, primary-income inflows have increased in all major economies except China. In contrast, China’s implied yield declined in 2024 relative to 2021. Figure 4 illustrates this pattern. In absolute terms, the implied yield—defined as primary-income credit divided by lagged external assets—was 2.91% in 2024, which is 55 basis points lower than the 3.46% implied yield in 2021. Over the same period, the average federal funds rate rose sharply from 0.08% to 5.14%. This divergence has raised concerns about the quality of China’s primary-income data.

Conceptually, returns on external assets depend on the composition of China’s global investment portfolio. It is theoretically possible that China simply earned low returns globally, generating yields below even the U.S. risk-free rate. The right panel of Figure 4 shows China’s external asset positions in 2023: USD 3.45 trillion in reserve assets, USD 2.96 trillion in FDI assets, USD 2.10 trillion in other assets, and USD 1.12 trillion in portfolio assets and derivatives, amounting to USD

9.62 trillion in total. The implied yield of 2.91% in 2024 must therefore be accounted for by the asset-class-specific returns weighted by their respective shares.

Precisely identifying the return on each asset category is challenging. We therefore conduct a simple back-of-the-envelope assessment of whether the BOP-implied yields appear plausible. For portfolio assets, we use the reported return of the China Investment Corporation (CIC), China's sovereign wealth fund, as a proxy. CIC reported an average annual return of 6.57% over the past decade on its overseas portfolio in 2023. For reserve assets, detailed information on returns and currency composition is limited. A reasonable assumption is that most Chinese reserves are invested in U.S. Treasury securities. According to U.S. TIC data, China held USD 780 billion in U.S. Treasuries as of June 2024 (USD 753 billion long-term and USD 28 billion short-term). Foreign holdings have an average maturity of 6.3 years, so we proxy the reserve-asset return using the fitted yield on a 6-year zero-coupon bond in 2024, which is 4.05%.

Using these two inputs, we trace all combinations of FDI returns and other assets returns that, together with their 2023 asset shares, deliver the implied aggregate yield of 2.91%. This is shown in Table 4. Given that FDI is risky whose expected return should exceed the global risk-free rate (4.05%), the implied return on other assets must be negative to reconcile the aggregate return of 2.91%. While negative returns on other assets—such as bank loans and trade credit extended to developing countries, especially under the Belt and Road Initiative—are plausible, the magnitude of the negative return (-2.5%) required to match a 2.91% aggregate yield appears unusually large.

Evaluating whether China's BOP primary-income flows are understated is potentially important. To gauge the scale, consider the gap implied by the above calculations. If the true return were equal to the return on the reserve assets of 4.05%, the implied underreporting would be roughly 1.14 ($=4.05-2.91$) percentage points. Applied to China's USD 9.62 trillion external asset position, this corresponds to approximately USD 110 billion ($=9620*1.14\%$) in underreported income.

This amount is comparable in magnitude to the discrepancy between China’s customs and BOP measures of the trade balance.

Table 4 NET INVESTMENT INCOME

	Total External Assets	Portfolio Assets	Reserve Assets	FDI	Other Assets
2023 Value	9.6	1.1	3.4	3.0	2.1
% Share in total	100	11.6	35.8	30.7	21.9
A Back-of-Envelope Calculation on Implied Return					
Known Return	Total External Assets	Portfolio Assets	Reserve Assets		
	2.91	6.57	4.05		
Assumption on FDI return	Inferred Other Assets Return				
1. Portfolio return: 6.57	-6.04				
2. Reserve assets return: 4.05	-2.50				
3. Total asset return: 2.91	-0.90				
4. Zero return: 0	3.19				

3 Roles of Industrial and Trade Policies

China is known to have a large number of industrial policies. Data from the Global Trade Alert indicate that China implemented around 5,400 subsidy policies between 2009 and 2022, equivalent to roughly two-thirds of all such measures adopted by G20 advanced economies combined (Gourinchas et al. 2024). This pattern raises the question of whether industrial policies that subsidize the export sector have contributed to China’s large current account surplus by expanding the country’s manufacturing trade surplus. We argue that industrial policies can result in large sector-level trade surpluses, but are nonetheless less likely to produce a significant economy-wide current account surplus. The basic logic is that the general equilibrium effects of industrial (or trade) policies can often differ from a partial equilibrium intuition. We will use the research on trade subsidies as an example.

Subsidies

There is growing empirical evidence on how subsidies in a given sector results in the expansion of that sector. For example, [Barwick et al. \(2025\)](#) examine the Chinese policy aiming to propel its shipbuilding industry to become the largest globally. They find that this policy led to a substantial increase in China's share of the global market in commercial shipbuilding. The program has massively increased the Chinese and the global shipbuilding capacity, which reduced freight costs and boosted both global imports and exports. Similarly, using cross-country, product-level import and export data in a difference-in-differences framework, [Rotunno and Ruta \(2024\)](#) find that subsidies promoted Chinese exports and limited imports for products targeted by industrial policy relative to those not covered. [Jean \(2026\)](#) also documents that, at the product or sector level, Chinese domestic subsidies have significantly raised its net exports in the same sectors while lowered its export prices relative to the world level.

While industrial policies can produce significant sector-level effects, several caveats are worth noting. First, these studies are largely partial-equilibrium in nature, particularly those based on difference-in-differences estimation, and thus face challenges in scaling up micro-level findings to the macroeconomic level. This aggregation problem, sometimes referred to as the “missing intercept problem,” complicates the link between micro and macro evidence.

The general equilibrium effect should start from the Lerner Symmetry Theorem. In an economy with full employment, an increase in the import barriers tends to reduce both exports and imports. Higher import barriers would make foreign-made products more expensive, hence imports would fall, and the previously uncompetitive domestic import-competing sector would expand. However, since the economy is at full employment, the only way the import-competing sector can expand is by taking resources away from other domestic sectors, including the exporting sectors. Thus, higher import barriers tend to depress domestic exports and imports. In the memorable language

of the Lerner Symmetry Theorem, a tax on imports is a tax on exports. Higher import barriers can make an economy more closed in terms of both exports and imports, but may not reliably raise the country's trade surplus.

Similarly, a subsidy to the exporting sectors would generally raise both imports and exports. When the exporting sectors expand, they tend to take resources away from the rest of the economy, including domestic import-competing sectors. When the latter shrinks, the country's imports rise. Because both exports and imports increase in response to an export subsidy, the subsidy may not reliably boost the trade surplus. This logic also helps us understand why China's efforts to subsidize imports through its government-sponsored annual Import Expo since 2017 have not significantly reduced its trade surplus either.

Note that the strict version of the Lerner Symmetry Theorem assumes full employment (i.e., no slack in the economy). When there is slack, a portion of the economy's response to an industrial policy subsidy may be a reduction in the slack. Nonetheless, the general equilibrium effect implied by the Lerner Symmetry theory would still be present, but with a somewhat weaker force.

To summarize, while sector-specific subsidies succeed in generating trade surpluses at the sector level, these effects may not translate into a significant aggregate current account surplus once the general equilibrium effects due to the logic of the Lerner Symmetry are considered. Fully accounting for these general equilibrium effects likely requires a structural model to quantify the overall impact of industrial policy on the current account.

Does China's Unilateral Trade Liberalization Contribute to a Rise in the Trade Surplus?

While a partial equilibrium effect of import liberalization raises a country's imports, the general equilibrium effect of the same import liberalization by a developing country can even promote exports more than it does imports. This is the point made by [Ju, Shi, and Wei \(2021\)](#) in their study

of the effect of China's accession to the WTO.

Their model is a dynamic Heckscher-Ohlin model with a Uzawa-style endogenous discount rate. According to the model, a reduction in the import barriers by a typical developing country (whose capital stock per person is below the world average) generally leads to an increase in its exports by a greater amount than the increase in imports, resulting in an improvement in the trade balance. Of course, along the way, the country's savings rate goes up by more than the change in the investment rate.

Here is the intuition. Before the trade liberalization, domestic and international interest rates were in equilibrium (after accounting for the cost of moving capital across borders). Now consider a unilateral reduction in the import barriers. The key is to realize that the surge in imports is in capital-intensive goods, and the import surge tends to put downward pressure on the domestic interest rate, which produces an incentive for part of the domestic savings to be exported abroad. The way the equilibrium is restored is for the country to run a current account (and trade account) surplus. This means that, following the trade liberalization, not only would both exports and imports increase (as the Lerner Symmetry Theorem would tell us), but the increase in exports must be greater than the increase in imports. So this is like the Lerner Symmetry Theorem on steroids.

If this were a static model (in which capital endowment is fixed), what is described above is essentially the Stolper-Samuelson Theorem. Once we go to an infinite horizon with an endogenous capital stock, the existing literature does not tell us what would happen. In fact, there is an interest rate over-determination problem that needs to be solved. On the one hand, the standard intertemporal problem ties the interest rate to the subjective discount factor. On the other hand, the Heckscher-Ohlin structure connects the interest rate to goods prices only without any reference to the preference parameter. The Ju-Shi-Wei model resolves this conflict by incorporating a Uzawa-style endogenous discount factor.

Note, for a typical developed country whose per capita capital stock is above the world average, a similar import liberalization would produce a deterioration of the trade balance. So the prediction for developed countries is less surprising. In China's case, the sharp rise in the current account surplus in the early 2000s coincided with China's accession to the WTO. A central feature of this liberalization was a significant unilateral reduction in import tariffs. From a partial-equilibrium perspective, lower import tariffs should raise imports and thus worsen the trade balance. However, the general equilibrium forces described in the Ju-Shi-Wei model operate in the opposite direction, generating outcomes consistent with China's experience. By the way, by this logic, an increase in import barriers could lead to a reduction rather than an increase in trade surplus in general equilibrium.

Alessandria et al. (2017) also study factors that account for China's trade balance and accumulation of foreign assets using a two-country DSGE framework with dynamic exporting decisions, pricing-to-market, incomplete financial markets, and aggregate shocks to trade barriers, productivity, and preferences. Their model allows changes in technology, trade costs, and preferences to jointly explain the dynamics of China's gross and net trade flows, export participation, real exchange rate, and output growth from 1990 to 2014. It is important to note that this model does not take into account differences in factor intensity between exportable and import-competing sectors. They find that changes in trade barriers are a key determinant of China's trade balance and foreign asset accumulation, estimating that reductions in trade barriers alone account for 70 percent of the foreign assets accumulated by 2014.

This literature highlights the limitations of static or partial-equilibrium frameworks when evaluating the effects of industrial or trade policy interventions on the current account. General equilibrium adjustments can overturn partial-equilibrium predictions. For instance, although import liberalization mechanically reduces the trade balance by increasing imports, this effect may be

offset if the resulting decline in the return to capital induces higher savings, thereby raising the current account balance. Consequently, understanding the macroeconomic implications of trade policy requires a framework that fully incorporates these general equilibrium mechanisms.

In summary, industrial policies such as sector-specific import subsidies are unlikely to have played a major role in shaping China's current account balance. Instead, large structural changes in trade costs—most notably the extensive trade liberalization of the 2000s—are more plausibly linked to the emergence of China's current account surplus. Reductions in import costs can generate a current account surplus precisely through general-equilibrium adjustments, including changes in relative prices, export participation, and savings behavior. Consistent with this mechanism, the sharp increase in China's current account surplus from 2000 to 2007 coincides with the period of import liberalization following WTO accession, and the subsequent decline in the surplus aligns with the gradual fading of these effects. Thus, import liberalization appears to have been an important contributor to China's current account dynamics.

4 Structural Factors

Long-run structural factors help explain the patterns and dynamics of China's current account balance. For example, demographic characteristics—such as the age structure and gender composition of the population—affect household saving behavior, which in turn influences aggregate saving and thus the evolution of the current account. Indeed, Figure 2 shows that China's savings rate has risen markedly since the early 2000s. Consequently, many studies that seek to explain China's saving patterns can also be used to shed light on the behavior of its current account.

4.1 Unbalanced Sex Ratio

A growing literature highlights demographic forces as a key driver of China's elevated household saving rate, with the skewed sex ratio receiving particular attention. [Wei and Zhang \(2011\)](#) propose a "competitive savings" theory: one motivation for personal or household savings is to raise one's competitiveness in the dating and marriage market. This component of savings tends to rise with an increase in the imbalance of the male-female ratio in the marriage age cohort (in either direction). In China's case, a rise in the male-female ratio in the youth cohort since the 1990s has translated into a powerful force to lift the household savings rate.

The mechanism is as follows: As the marriage market becomes increasingly competitive for young men, parents with a son raise their savings to improve their son's relative standing in the relative market. At the same time, parents with a daughters face conflicting incentives on savings. On the one hand, they can reduce their savings to take advantage of the increased probability of marriage of their daughters. On the other hand, they may wish to raise their savings to preserve their daughters' bargaining power within marriage.

In the data, [Wei and Zhang](#) find strong evidence that a combination of having a son at home and living in a region with a skewed sex ratio greatly pushes up the household savings rate. On the other hand, savings by households with a daughter are not systematically related to the local sex ratio. Across regions, the local sex ratio in the youth cohort strongly predicts the local household savings rate. Their estimates suggest that this mechanism accounts for more than half of the increase in China's household saving rate between 1990 and 2007.

Building on this insight, [Du and Wei \(2013\)](#) develop a quantitative model linking China's unbalanced sex ratio directly to its current account dynamics. In their framework, an increasingly competitive marriage market induces young individuals—particularly men, but also women—to accumulate more savings in order to improve their marriage prospects. This upward pressure on

savings, combined with relatively stable investment demand, generates persistent excess savings and a higher current account surplus. Their calibrated model indicates that the marriage-market mechanism is quantitatively significant and can account for a substantial portion of China's elevated savings and, consequently, its sustained current account surplus.

The unbalanced sex ratio in China, as a structural determinant of household saving behavior, is likely to have been an important contributor to China's current account dynamics. The literature shows that the rising sex ratio imbalance helped explain much of the increase in China's current account surplus prior to 2007. More recently, the gradual improvement in the sex ratio aligns with the decline in China's current account surplus after 2010, consistent with the view that demographic pressures in the marriage market have eased over time.

4.2 Fertility and Social Safety Net

Aside from the sex ratio, changes in the fertility rate and the age structure can also affect economy-wide savings rate. In a structural overlapping-generations model, [Curtis et al. \(2015\)](#) highlight three such mechanisms. First, a decline in the fertility rate following the one-child policy reduced the burden of the families supporting dependent children, allowing them to allocate a larger share of income to saving. Their quantitative exercises show that holding the family size at its 1970 level would have lowered the 2009 saving rate by seven percentage points. Second, an increase in the share of individuals of prime working years in the population from the 1970s to 2000s can raise savings rate. Third, a decline in the number of children per family implies that today's workers will face in their retirement more limited support from their children. In the absence of a correspondingly improving social safety net, this could trigger an increase in the precautionary savings rate. The authors claim that these channels could explain more than half of the observed increase in the savings rate from 1955 to 2009.

Niemeläinen (2021) provides another formulation of the role of the precautionary savings by emphasizing an interaction between rising life expectancy combined with limited social security coverage. Between 1980 and 2015, China experienced an increase in life expectancy, approaching levels observed in advanced economies. However, despite this rapid aging, China's public spending on old-age social security remained comparatively low. Faced with longer expected retirement periods and limited pension support, households responded by increasing their savings, thereby strengthening the current account and contributing to the accumulation of foreign assets. Using a life-cycle model, the author quantifies the contribution of population aging and pension income to China's external balance. The results show that the combination of rising longevity and modest pension benefits can account for a substantial share of China's high saving rate and sustained current account surpluses—effects that more than offset the downward pressure on the current account associated with China's high productivity growth.

It is important to note that the Chinese social safety net, however imperfect it may be relative to those of the advanced economies, has been improving substantially over the last thirty years. The improvement in old-age pension, subsidized medical care, and other benefits is reflected in both ever expanding coverage of the population as well as the rise in the generosity of the coverage. Such improvement in the social safety net should have led to a reduction in the precautionary savings and therefore a rise in the consumption rate. As the above two papers take the (imperfection of the) social safety net as given, they may have exaggerated the role of precautionary saving in the rise in the economy-wide savings rate.

It is also useful to note that the public expenditure as a share of GDP tends to be strongly positively correlated with the income level of a country. While the Chinese social safety net expenditure (as a share of GDP) is not as generous as France or Norway, it is comparable to other countries at a similar level of economic development such as Mexico or Brazil (Lardy 2025). For

this reason, it is not obvious that massively raising the public expenditure on social safety net is the socially efficient thing to do, especially if additional such spending could compromise the rate of economic growth.

4.3 Financial Development

Financial market imperfections are another structural factor behind China's high national savings rate. Since the banking system favors state-owned firms, many non-state-owned but high-productivity firms have difficulty with access to finance and therefore save for their own investment. This leads to a higher level of corporate savings.

A key theme in the global imbalances literature is that differences in domestic financial market development can shape international capital flows. For example, [Caballero et al. \(2008\)](#) highlight the role of an economy's capacity to supply safe assets: as fast-growing but financially underdeveloped economies expand, they are unable to generate sufficient domestic safe assets and therefore demand those supplied by advanced economies. In this framework, countries like the United States supply safe assets, while less financially developed economies run current account surpluses to acquire them. Similarly, [Mendoza et al. \(2009\)](#) model financial development as the share of income that residents can divert from creditors, which determines the country's borrowing capacity. They show that, following financial integration, differences in financial development across countries naturally generate global imbalances. These mechanisms have direct implications for China: its rapid economic growth, limited domestic financial development, and deepening global integration coincide with the period during which China's current account surplus expanded.

The model of [Song et al. \(2011\)](#) features two types of firms: high-TFP firms that face severe financial frictions and must finance investment through internal savings, and low-TFP firms with better access to external credit. During the transition towards the long-run steady state, as

high-TFP firms expand, they outgrow the low-TFP firms, but financial frictions force them to rely heavily on internal funds to support investment. As a result, the model generates high growth, high savings, and a current account surplus, consistent with China's experience. This mechanism is particularly salient for China, where financially constrained high-TFP firms—especially in the private sector—have long played a central role in aggregate dynamics.

Financial frictions facing households can also raise household savings. [Coeurdacier et al. \(2015\)](#) show in an open-economy OLG framework that the interaction between growth differentials and household credit constraints—which are more severe in fast-growing economies—can help explain capital outflows from emerging to advanced economies. The intuition is as follows. Faster growth in emerging economies lowers the global interest rate, which encourages borrowing by young households, especially in advanced economies with looser credit constraints. Middle-aged households increase their savings due to a dominant income effect, and this effect is stronger in economies with fewer borrowing constraints. Consequently, savings rise more sharply in emerging markets, generating net capital outflows toward advanced economies. This mechanism is relevant for China, where households face well-documented and substantial credit constraints.

The financial development story should predict a rise in the savings rate in the 1990s and early 2000s and a decline in the more recent years. Specifically, severe financial frictions on both the household and firm sides in the earlier periods likely contributed to elevated household and corporate savings, consistent with the rise in China's current account surplus before 2008. Since then, these frictions have generally eased, particularly with the expansion of Fintech, which has significantly improved household access to credit through mortgages and consumer loans. FinTech such as Ant Financial's loans to micro and small firms allow these firms to obtain funding that they would not have access to previously. Although private firms continue to face substantial financing constraints, their access to alternative funding sources is also better than it was two decades ago.

These developments align with the predictions of financial development theories regarding the evolution of China's current account.

5 Other Factors

5.1 Housing Market

The discussion thus far has emphasized structural factors, but cyclical conditions also play an important role at any given point in time. Around two years ago, China's aggregate demand was weak, and the economy was close to a low-level deflationary equilibrium. Because most households are net creditors, deflation reduces household wealth and depresses consumption by more than it affects current income. This dynamic, in turn, lowers demand for foreign goods, leading to fewer imports than would be implied by structural factors alone.

Weakness in the housing market has further weighed on aggregate demand by eroding household balance sheets and self-assessed wealth, thereby suppressing import demand and raising the trade surplus. The current housing downturn can be traced back to the introduction of stringent regulatory measures in 2020 aimed at curbing leverage among real estate developers. These policies marked the onset of a prolonged housing slump with significant negative spillovers to the broader economy (Chen, Du, and Ma 2024). Anderson (2025) argue that housing market weakness has been an important contributor to China's trade surplus, particularly through its effect on imports. Indeed, while China's export growth does not appear unusual relative to other emerging market economies, imports have declined sharply, in contrast to the rising import demand observed elsewhere. This pattern is consistent with contracting domestic demand, especially reduced household spending related to housing purchases.

Although the housing downturn is a meaningful contributor to China's current account surplus

in recent years, it is unlikely to be an enduring driver. A sluggish housing market in recent years weakens household demand and amplifies the pessimism of the consumers, it does not explain the sizable current account surpluses before 2019, when the housing market was expanding robustly. The recent boom–bust cycle in real estate has acted as a cyclical amplifier. Deeper structural forces remain the primary determinants of China’s high saving rate and persistent trade surpluses.

5.2 Exchange Rate

Exchange rate policy can be used to influence the path of consumption—and thus savings—in an economy. For example, in a model with both tradable and non-tradable goods, the real exchange rate is positively linked to the ratio of tradable to non-tradable consumption. Any policy that distorts this ratio can potentially alter the trade balance and, in turn, the current account.

Altering this ratio by an exchange rate policy can be welfare improving if there is scale economies (or positive externalities) in the tradable sector. To stimulate growth in this sector, the government has an incentive to depress tradable consumption and thereby lower the real exchange rate. As a result, resources such as labor shift from the non-tradable to the tradable sector. Tradable production increases while tradable consumption is restrained, leading to a trade surplus (and a current account surplus). In other words, the real exchange rate policy itself generates the surplus in the current account.

There are specific examples in the literature that show how to use different policies to affect the real exchange rate and thus current account balances. For example, [Jeanne \(2013\)](#) presents a simple model to show that by accumulating reserves and imposing capital controls, the government can control the current account balance and also the real exchange rate. This is because reserves force the private agents to hold domestic bond and the capital controls prevent them from undoing this through borrowing from the rest of the world. Therefore, a suitably chosen combination of

reserves and capital controls can implement any path of tradable consumption in the economy, and thus the real exchange rate and current account.

Similarly, [Benigno et al. \(2022\)](#) develop a two-sector model with endogenous growth in the tradable sector. In their framework, the government has an incentive to use reserve accumulation to influence the real exchange rate and, consequently, the current account. Because of financial frictions, private agents cannot fully offset the effects of the government's reserve accumulation. In this setting, a real exchange rate depreciation policy is consistent with higher growth, a current account surplus, and sustained reserve accumulation—patterns.

Because China has extensive capital controls, has been accumulating foreign exchange reserve, and exhibits a high level of growth especially in its tradable sectors, the models described above offer a plausible interpretation of the Chinese experience.

While exchange rate manipulation is a popular charge levied on China, its role in China's current account surplus may be exaggerated. In particular, structural factors discussed in the previous section can produce observationally equivalent outcomes as the hypothesized exchange rate policy. For example, [Du and Wei \(2016\)](#) show that an unbalanced sex ratio increases economy-wide savings, thereby reducing consumption of both tradable and nontradable goods. Because the price of tradable goods is tied down by the world market, the sex ratio shock produces a decline in the relative price of nontradable goods. As a result, the real exchange rate depreciates, since it is closely linked to the price of nontradable goods.

Moreover, demographic pressures may influence labor supply. A higher male-to-female ratio can induce men and parents with an unmarried son to supply more labor in order to improve their competitiveness in the marriage market. If the nontradable sector is relatively labor-intensive, this additional labor supply further depresses nontradable prices and strengthens the negative effect on the real exchange rate. Thus, an appearance of “real exchange rate undervaluation” may arise from

structural demographic forces rather than solely from a deliberate government policy.

In a country with capital controls (such as China), the enforcement of capital controls requires the exporting firms to surrender their foreign exchange earnings to the central bank. This involves the central bank using the local currency (RMB) to purchase the dollars. Such a transaction is observationally equivalent to the standard description of the foreign exchange intervention even though the root cause is a rise in the sex ratio.

To summarize, although current account surpluses and real exchange rate undervaluation are theoretically linked, the direction of causality can run both ways, reflecting a combination of policy interventions and structural factors such as demographics. Consequently, attempting to determine whether an undervalued renminbi caused China's current account surplus—or vice versa—is often uninformative. This discussion does not suggest no foreign exchange intervention by the Chinese authorities. Rather, the relative importance of structural factors versus exchange rate policy cannot be determined by merely observing the central bank's behavior.

A separate point is related to the (mis-)measurement of the effective real exchange rate in a world of global supply chains. A commonly used indicator is some weighted average of the bilateral exchange rate where the weights are typically proportional to the volume of bilateral trade, but this measure can be misleading. For example, if the only trade among China, Japan, and the United States is that China buys intermediate inputs from Japan, and combines them with domestic inputs to produce products that are exported to the United States. In such an example, the conceptually correct measure of China's effective exchange rate should assign a negative weight to the China-Japan trade volume because an appreciation of the Chinese yuan against the Japanese yen would raise rather than diminish China's competitiveness. Yet, no standard measures of an effective exchange rate adopted by the IMF, BIS, or other international bodies would take into account such supply chain structures. As sectors participate differently in international trade, sector-specific

price movements also play an important role in determining the real exchange rate, as shown by [Patel et al. \(2019\)](#). That study also shows that China's effective real exchange rate, when adjusted for the structure of the global supply chains, has appreciated much faster than the standard measures that do not take into account supply chains. For these reasons, assessing the causal relationship between China's current account dynamics and the real exchange rate is inherently difficult: both variables are endogenous and jointly shaped by deeper forces, and the measurement of the real exchange rate introduces an additional layer of complexity.

5.3 Assessing an Interplay Hypothesis Regarding Housing Market, Industrial and Macro Policies

One popular hypothesis relates China's recent surge in trade and current account surpluses (in the dollar amount though not as a share of its GDP) to the housing market and macroeconomic policies. It goes as follows. First, the weakness in China's housing market since 2021 has reduced the household wealth, leading to a reduction in both domestic consumption and imports. Second, the Chinese government responds to this problem by ramping up subsidies and bank loans to firms to keep them afloat, resulting in an increase in their production capacity, an increase in the country's trade surplus, and a deflation. Third, because the authorities intervene in the currency market to prevent a meaningful appreciation of the Chinese RMB that would have been warranted by the increased trade surplus and deflation, the Chinese real exchange rate becomes more undervalued, leading to a further increase in its trade and current account surpluses. This hypothesis stresses an interplay among the housing market and various policies and its effect on trade surplus and other outcome variables.

To assess the validity and economic significance of the hypothesis, we start by observing that Part 1 of the hypothesis aligns well with the data. However, as discussed in [Section 2](#) of the paper,

there has been no sharp surge of either trade surplus or current account surplus as a share of China's GDP since 2021. More precisely, if we only look at goods trade balance as reported by the Chinese Customs, there appears to be a noticeable uptick since 2018. While it has not reached the previous peak in 2007, one cannot reject the null hypothesis of an upward trend. Because China runs a persistent service trade deficit, and because the Customs data may exaggerate the magnitude of goods trade surplus, the combined goods and service trade balance in share of GDP, as reported in the Chinese balance-of-payments data, does not exhibit a strong surge in recent years, and is much lower than the previous peak. Even with slack in the economy, the general equilibrium effect of the subsidies on trade surplus still differs sharply from the partial equilibrium intuition. The rise in China's share in Europe or other trading partners' imports is mostly driven by a relatively faster growth in China than the partner countries.

Many of China's subsidy programs have likely generated distortions. [Wei, Xu, Ge, and Zhang \(2023\)](#) is one of the papers that quantify the distortions. China can also benefit from a more market-determined exchange rate. Furthermore, China also needs more expansionary monetary and fiscal policies to both move the economy away from a deflationary trap and raise the country's imports as a share of GDP in the short run. Nonetheless, the data do not appear to support the interplay hypothesis as stated above.

6 How to Reduce China's Current Account Surpluses?

The economics literature has pointed to many reasons why people tend to under-save, such as due to a hyperbolic utility function. Many behavioral interventions in the literature are designed to raise people's savings rate. Therefore, there is a presumption that most households in most countries probably save less than what is socially optimal. For this reason, one cannot conclude that the

Chinese savings rate is inefficiently too high just because it is higher than that in other countries.

Nonetheless, the extra household savings (and the resulting extra current account surplus) due to a skewed sex ratio is socially inefficient (Wei and Zhang 2011). However, policies aiming at subsidizing consumption or promoting imports do not address the root cause of the competitive savings motive. Raising the social and economic status of women and correcting the sex ratio imbalance at birth are the necessary policy remedies in the long run.

A part of the extra corporate sector savings is a second-best response to the difficulty with access to finance by high-productivity non-state-owned firms. Financial sector reforms that improve the allocation of capital towards the high-productivity firms could reduce the excessive corporate sector savings. A subsidy to consumption and an artificial revaluation of the Chinese exchange rate would not address the root cause of this part of extra savings.

Raising the level of generosity of the social safety net would seem to be able to reduce the precautionary savings of the households. However, since the Chinese public expenditure on social safety net as a share of GDP is approximately comparable to other countries with a similar level of income, it is not obvious that there is tremendous room to raise the expenditure further. Importantly, overly-generous social safety programs such as those in Western Europe is a possible reason behind a stagnant economic growth rate and a high natural rate of unemployment in many of the European countries. One needs to be vigilant about the risk of using a cure to reduce savings rate that could create a more serious problem in the long run.

While many of the industrial and trade policies may be distortionary and a factor behind sector-level trade imbalances, they are unlikely to be quantitatively important for economy-wide trade or current account surpluses.

Weak aggregate demand due to deflation and a soft housing market is an important cyclical factor that puts downward pressure on consumption and imports. Therefore, a more aggressive

package of monetary and fiscal stimulus that aims at resolving deflation and the housing market problem would help with boosting domestic demand in the short run. In the long run, the country needs policy reforms that address the structural factors behind the excessive savings problem. They would include reforms that aim at eliminating a skewed sex ratio at birth and improving financial access by those non-state-owned firms with a high growth potential. While those reforms may not lead to an immediate reduction in the national savings rate and current account surpluses, they are needed now so we will not have to deal with the same excessive savings problem a decade from now.

7 Conclusion

This paper examines the determinants and measurement issues surrounding China's current account surplus. It shows many popular conclusions on the causes of its large trade and current account surpluses may need significant qualifications. These qualifications would help to revise our views about what policy reforms are effective or ineffective at reducing these surpluses.

Over-reported exports due to an elevated desire by exporting firms to over-claim VAT rebates in recent years and under-reported imports due to an elevated desire by importing firms to evade import tariffs that have been raised to retaliate against the Trump tariffs suggest an increase in the upward bias in the customs-recorded goods trade surplus. We find that correcting these mis-measurements can greatly shrink the gap between the customs-recorded and SAFE-recorded goods trade surplus. The small remaining gap may be accounted for by the differences in the accounting approaches between the customs and SAFE in dealing bonded zones and processing trade. In sum, we cannot reject the null that the SAFE-reported goods trade surpluses are compatible to Customs-reported numbers after suitable adjustments to the latter.

China reported net investment incomes in recent years are low relative to the experience of other countries. Whether such incomes are understated or not depends critically on the returns on “other assets,” including Belt-and-Road projects. For example, if many such projects have experienced big negative returns so that the overall returns on “other assets” are -3% per annum, then the overall net investment income in the balance-of-payments data could be rationalized. One needs additional disaggregated data from the authorities to fully resolve the question on net investment incomes.

We also show that industrial policies, including sector-level subsidies, and trade policies, such as import barriers, have significant effects at the sector level but likely play a limited role in shaping the economy-wide current account imbalance. Consistent with the Lerner Symmetry Theorem, subsidies tend to boost both exports and imports, which may help explain why Chinese import-to-GDP ratios are higher than those of the United States. The existence of slack in the labor market in recent years may weaken the Lerner Symmetry force a bit, but the fundamental insight is still there: the general equilibrium effect of a given industrial or trade policy on the trade or current account surplus can be very different from the partial equilibrium intuition. Import barriers, by the logic and evidence presented by [Ju et al. \(2021\)](#), may have reduced rather than enlarged China’s trade surplus.

Structural factors, most notably a worsening sex ratio imbalance in the last two decades and financial underdevelopment, are some key drivers of China’s excess household and corporate savings that produce a current account surplus. The rise in the sex ratio explains roughly half of the increase in household savings, while constraints on non-state-owned firms’ access to finance, combined with productivity growth, have contributed to higher corporate savings rates.

These findings carry important implications for policy discussions. Efforts to address China’s current account surplus need to take structural determinants seriously, rather than focusing solely on trade or industrial policies. While short-run macroeconomic stimulus aiming at addressing

housing market weakness and deflation can help boost consumption and reduce trade surplus in the short run, policy reforms aiming at addressing structural factors underlying excess household and corporate savings are needed as part of a sustained long-term solution.

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