Global Tides on Local Shores: how do international capital flows affect house prices?

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Abstract

Although housing markets are inherently local, they have become increasingly influenced by global capital movements in recent decades. Rising house prices are often found to be associated with large capital inflows, but the relationship has fluctuated over time and is far from uniform across time and across countries. It was strongest immediately before and after the global financial crisis (GFC), a period that was quite special because a global savings glut coincided with domestic financial deregulation in many countries. In contrast, the capital-flow-house price link seems to have weakened again over the past decade as macroprudential regulations have deliberately attempted to mitigate the impact of capital flows on house prices. I argue that the correlation between capital inflows and house prices, as well as the degree of international synchronization of house prices, will continue to fluctuate over time, even as housing prices increasingly are related to the same global risk factors that drive global capital flows and the prices of financial assets.
Key words: house prices, international capital flows, financial liberalization, savings glut, macroprudential regulation, global financial cycle, migration, foreign buyers, asset pricing.

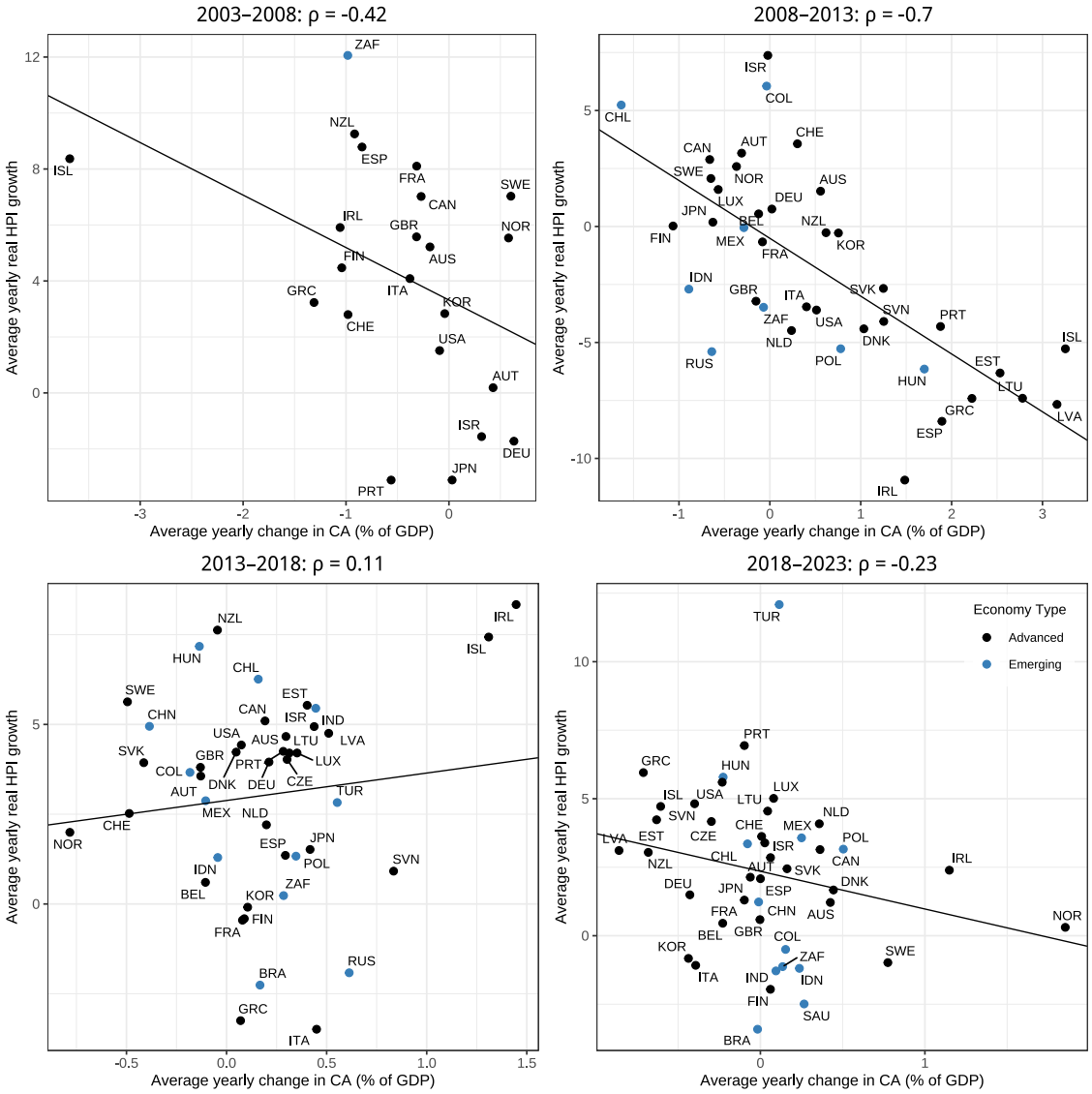
1 Introduction

By its very nature, the market for residential housing is highly local. Housing is the ultimate non-tradable good, after all. Still, housing markets have not escaped the sweeping influence of globalization. In this essay I provide an interpretative review of the literature on the link between house prices and international capital flows. I argue that the internationalization of capital flows over the last three decades has become an important driver of house prices around the globe but that the link between house prices and capital flows is far from stable and that we should expect it to vary over time.

The link between housing markets and capital inflows matters for a variety of reasons. First, housing bubbles often lead to concerns regarding financial and even political stability. Financial crises related to deteriorating housing debt—as compared to e.g. pure banking crises—have been shown to be among the most long-lasting financial disturbances with the largest real effects. And when foreign capital drives up local house prices, local residents may get priced out, which may contribute to rising inequality and to a political backlash against trade and financial globalization.

Figure 1 documents the basic facts that are the focus of this survey. The various panels show the medium-term relation between capital inflows and house prices for a cross-section of developed and emerging economies for five-year periods from 2003-2023. The message is clear: high capital inflows are generally associated with rising housing prices. However, the link does not appear to be stable over time. While it appears particularly pronounced in the boom-years prior to the global financial crisis (GFC) and during its immediate aftermath, it seems to have weakened again in the last decade and even seems to briefly have turned positive in the period 2013-2018.

Figure 1: cross-country correlation between house price growth and current accounts – 2003-2023



Notes: The figure shows average yearly house price growth computed from the OECD house price indexes and average yearly current account to GDP balances (as percent of GDP) for a selection of advanced (black dots) and emerging (blue dots) economies for five-year periods from 2003-2023. The sample of countries may vary across five-year periods due to data availability.

To what extent is the cross-sectional correlation in Figure 1 causal, to what extent coincidental? Which factors can explain it? To what extent do global or local factors drive house prices (and their global comovement)? To structure the discussion, in the next section I will introduce a stylized model which allows to focus on three main potential explanations for the comovement between capital flows and house prices. While a richer set of features could easily be added to this framework, most em-

pirical contributions in the literature can be classified under the rubric of one of these three broad channels: international credit supply, domestic financial regulation and domestic income shocks. I will therefore structure my survey of empirical work along these three broad mechanisms. At the same time, the model also allows me to put the most prominent quantitative-theoretical contributions in the the extant literature into context.

2 A stylized model

To guide the discussion, this section presents a stylized model buidling on Monacelli (2009); Ferrero (2015); Hoffmann and Ruslanova Habibulina (2024). However, different from these papers (and following the setup in Mian, Sufi, and Verner 2020), I strip the model of all dynamics. In spite of this simplicity, the model features variation in international credit supply (liquidity shocks), shocks to domestic financial regulation (as captured by borrowing constraints) and also allows to study the impact of domestic income or terms-of-trade shocks.

2.1 Model setup

Consider a small open economy consisting of two sectors: a manufacturing sector (M) which produces a tradable good and a housing sector (H) which produces a housing stock. Labor is perfectly mobile across sectors within the region but immobile between regions. Households consume services from the stock of housing and a basket of differentiated home-produced and imported tradable goods.

Firms and production Households inelastically supply one unit of labor which may be employed in the manufacturing or housing sector. Labor is the only input factor used in production of the manufacturing good M,

$$Y_M = A_M N_M^{\alpha}, \tag{1}$$

where A_M is a constant total factor productivity and $\alpha \in (0, 1)$ is the output elasticity of labor in the manufacturing sector.

The stock of housing evolves according to

$$H = (1-\delta)H_0 + Y_{H,} \tag{2}$$

where $\delta \in (0,1)$ is a depreciation rate of the housing stock, $H_0$is some exogenous (or pre-determined) level of the housing stock and $Y_{H,t}$ is the production of new housing (construction and maintenance). The production of new housing depends on the amount of labor employed in the housing sector,

$$Y_{H,} = A_H N_H^{\eta}, \tag{3}$$

where A_H is a constant total factor productivity and $\eta \in (0,1)$ is the output elasticity of labor in the housing sector. Since labor is perfectly mobile between both sectors, wages equalize

$$W \equiv W_M = W_H. \tag{4}$$

Labor market clearing then requires that $N_M + N_H = 1$.

Household preferences and constraints The demand side of the economy is given by a representative household who maximizes isoleastic utility derived from a consumption bundle X

$$U_0 = \frac{X^{1-\sigma}}{1-\sigma} \tag{5}$$

where X is given by a CES-aggregation over the consumption of tradable goods C_t, and housing services which are proportional to the housing stock H:

$$X = \left[\gamma^{\frac{1}{\theta}} C^{\frac{\theta-1}{\theta}} + (1-\gamma)^{\frac{1}{\theta}} H^{\frac{\theta-1}{\theta}}\right]^{\frac{\theta}{\theta-1}}, \tag{6}$$

In the above, σ is the inverse of the intertemporal elasticity of substitution, $\gamma \in (0,1)$ is the expenditure share going to the tradable goods and θ is the intratemporal elasticity of substitution between

tradable goods and housing services.

Normalizing the price of the tradable good to unity, we can write the household's budget identity expressed in terms of tradable goods

$$C_t + P_t^H Y_t^H = WN + \Pi - CA \tag{7}$$

where $CA = Y_M - C$ is the current account, which by definition can only be expressed in tradables. International borrowing is financed by issuing international bonds at face value B which are then discounted with the interest rate r, so that

$$CA = -\frac{B}{1+r} \tag{8}$$

Following Mian Sufi and Verner, I assume that international borrowing is constrained such that

$$B \leq \rho \overline{Y}_M \tag{9}$$

where, to capture the fundamentally intertemporal character of borrowing in the model in a simple way, I assume that $\overline{Y}_M$ is the present value of all future (expected) tradable output such that $\overline{Y}_M = \sum_{s=0}^{\infty} \frac{Y_{M,s}}{(1+r)^s}$.

2.2 Key mechanism and empirical predictions of the model

The first order condition for consumption in this model is given by

$$\left(\frac{(1-\gamma)C}{\gamma H}\right)^{\frac{1}{\theta}} = P_H, \tag{10}$$

Conversely, the first-order conditions for profit maximization in the housing and manufacturing sectors define the slope of the production possibilities frontier

$$P_H = -\frac{\alpha A_M N_H^{1-\eta}}{\eta A_H \left(1 - N_H\right)^{1-\alpha}} \tag{11}$$

Capital flows and house prices: the basic link Using $C = Y_M - CA$, and plugging into (10) from the production functions for $H = Y_H + (1-\delta)H_0$ and Y_M,we get

$$P_H = \left(\frac{(1-\gamma)\left(Y_M - CA\right)}{\gamma\left(Y_H + (1-\delta)H_0\right)}\right)^{\frac{1}{\theta}} \tag{12}$$

which implies that capital inflows in the model are linked to higher house prices ceteris paribus. For a given level of tradable and non-tradable output, any additional borrowing just goes towards higher consumption. Specifically, for given Y_M, an exogenous increase in borrowing must lead to higher non-tradable consumption, simply because, $C = Y_M - CA$. Due to the relative demand function (10) this also increases demand for housing. Hence, for given $Y_H$and $H_{'0}$, house prices have to rise.

While this model has no dynamics, it is reasonable to assume that the supply of housing is more inelastic in the short-run than the long-run. Because labor market equilibirum requires that the marginal revenue product of labor has to be equated between the two sectors, according to equation (11) an increase in house prices will lead to a reallocation of labor towards the housing sector. This will mute the initial run-up in house prices, but it remains the case that an exogenous increase in international borrowing will be associated with higher house prices.

Main mechanisms: Global liquidity, domestic financial deregulation and income shocks We are now in a position to discuss the main three explanations for the observed link between international capital flows and housing prices. Consider the borrowing limit (9) above. To focus on the role of financial factors (global liquidity and domestic financial deregulation) first, assume further that manufacturing output is on trend and expected to be constant, so that $Y_M = Y_{M,s}$ for all $s \geq$0. Then,

assuming that the borrowing limit binds, we can write the current account as

$$CA = -\frac{\rho}{r} Y_M$$

which, plugging into (12), implies that

$$P_H = \left(\frac{(1-\gamma)\left(1+\frac{\rho}{r}\right) Y_M}{\gamma \left(Y_H + (1-\delta) H_0\right)} \right)^{\frac{1}{\theta}}$$

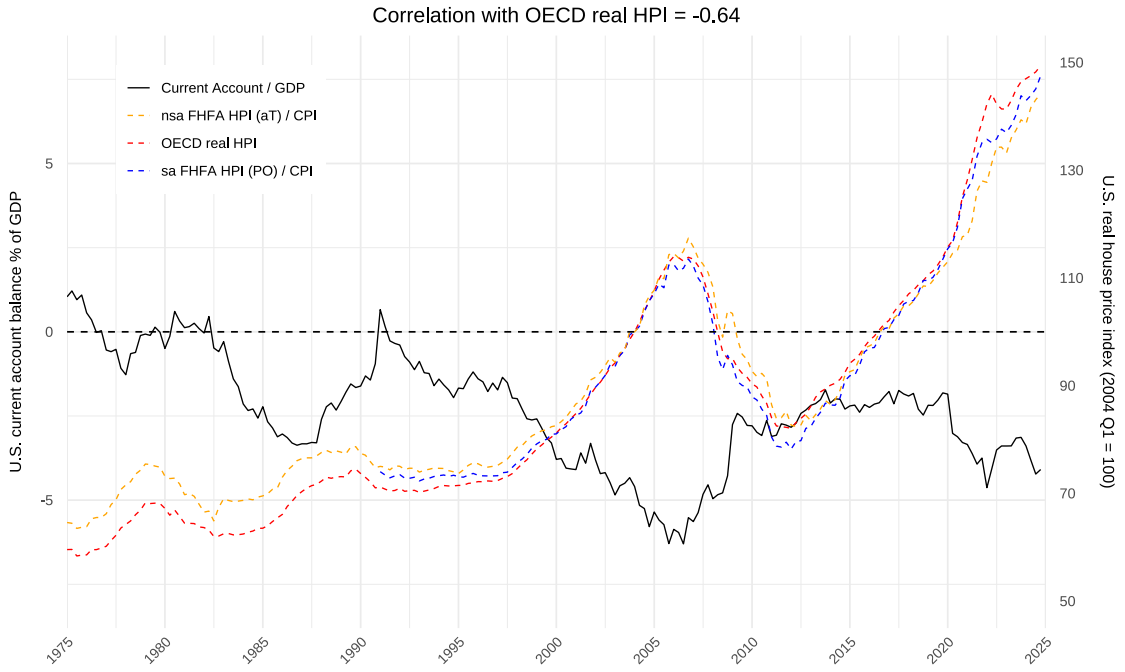
Hence, in the model an increase in the ratio $\frac{\rho}{r}$ leads to higher house prices. This could be achieved either through domestic financial liberalization (an increase in ρ which would increase the borrowing capacity of the economy) or a drop in the world interest rate r or a combination of the two. Note also that a decrease in Y_M, say due to a manufacturing recession or due to an adverse import competition shock, would lower house prices.

There is a venerable tradition in international macroeconomics to analyze the patterns of international capital flows in terms of (international) push and (domestic) pull factors. In these terms, domestic financial liberalization (an increase in ρ) and manufacturing productivity or terms-of-trade shock (exogenous variation in Y_M) could be interpreted as pull factors. Conversely, shocks to the world interest rate r would count as an international push factor. While this distinction is useful and suggestive, the above model somewhat cautions against it. In the model an increase in ρ and a decline in r are observationally equivalent and the two variables reinforce each other: financial liberalization will have a bigger effect on house prices if interest rates are low and vice versa. This is an interesting feature of the model, that is also empirically relevant. The literature on the house price-capital flow link really started with the period immediately prior to the global financial crisis of 2008-09, a period that was characterized by the coincidence of globally low interest rates with major financial deregulation in many countries, including, most notably, the US.

3 Domestic and international factors in the US housing boom-and-bust of the 2000s

The bulk of the quantitative-theoretical literature on the role of domestic and international credit supply factors and house prices has focused on one country and period: the United States in the years prior to the global financial crisis of 2008-09. This for obvious reasons. During this period, the US economy experienced a boom in housing prices that was accompanied by unprecedented current account deficits. Figure 2 illustrates the high time-series correlation between house prices and capital inflows into the United states during this period and during the subsequent crisis.

Figure 2: US current account and house prices 1975-2025



Notes: The figure plots quarterly time series of the US current account relative to GDP and of three different quarterly real US house price indexes for the period 1975-2025: the OECD HPI (red) as well as the non-seasonally adjusted all-transactions index (yellow) and the seasonally adjusted purchases only index (blue) from the Federal Housing Finance Agency (FHFA). The correlation of teh current acocunt with the OECD real HPI is indicated at the top of the figure.

These capital inflows were accompanied by a countervailing surplus in emerging economies while US and international interest rates remained quite low. One strand of the literature therefore has

interpreted this pattern as the reflection of a global savings glut (Bernanke (2005)). According to the savings glut hypothesis, domestic financial frictions (Mendoza, Quadrini, and Rios-Rull (2009); Song, Storesletten, and Zilibotti) lead to an excess demand for safe US assets (Caballero, Farhi, and Gourinchas (2008); Caballero and Krishnamurthy (2009)) in the emerging world, notably China, thus driving capital inflows into the US. This demand for safety then drove down global interest rates, leading to higher borrowing and consumption in the US and to higher house prices (and higher US asset prices more generally). While the savings glut is largely accepted as a well-established empirical fact, its actual role in driving up US house prices is, however, more controversial.

Favilukis et al. (2013) cast doubt on the savings glut interpretation of the US housing boom. They show empirically, using both US and international data, that capital inflows account for only a small fraction of the run-up of US house prices once interest rate movements and domestic bank lending attitudes are controlled for. However, they find that the interaction between bank lending attitudes and capital inflows has a consistently positive and significant effect on house prices, an interesting fact to which we return below.

Ferrero (2015) provides a model in which a decline in domestic lending standards (a rise of ρ in the model above) is the main driver of house price increases but that is nonetheless consistent with the stylized facts of the savings glut. The challenge here is that a relaxation of credit constraints on its own would allow households to satisfy their pent-up credit demand, which in turn should drive up domestic interest rates and, in an open economy, also lead to an appreciation of the real exchange rate. This pattern is inconsistent with US data in the years prior to the global financial crisis when interest rates were low and, if anything, decreased both in the US and globally. Ferrero solves this conundrum by pointing at the fact that emerging markets, in particular China pegged their exchange rates to the dollar, thus effectively importing the declining monetary policy interest rates for the US. Quantitatively, however, domestic factors—the declining lending standards captured by higher loan-to-value ratios and to a lesser extent preference shocks in favor of housing (also highlighted by Gete (2009))—account for the bulk of the run-up (and post-crisis decline) in house prices in Ferrero's model. In his calibration, they do not fully account for the widening US current account deficit though, with

declining interest rates explaining and the unilateral peg of the emerging economies accounting for the bulk of capital inflows.

A limitation of Ferrero's model is that declining interest rates and the relaxation of credit standards are independent of each other. The risk taking channel of monetary policy, however, would imply that declining interest rates themselves could have been a driving factor of the relaxation of credit standards.

Favilukis, Ludvigson, and Nieuwerburgh (2017)also identify a relaxation of credit standards—financial liberalization as the call it—as the driver of the run-up in house prices. Their model features both idiosyncratic and aggregate business cycle risk as well as a realistic household wealth distribution. The presence of aggregate risk in the model considerably amplifies the quantitative effect of financial liberalization because easier borrowing allows for better self-insurance and therefore reduces risk premia. This drives up price-rent ratios. At a same time, the presence of aggregate risk mutes the impact of a savings glut. The savings glut was mainly a foreign demand shock for US safe assets (treasuries). This additional demand can ceteris paribus only be satisfied by domestic residents selling treasuries. For domestic residents to sell safe assets will therefore require higher risk premia on risky assets (housing, which in the model is exclusively held by US residents). For a given user cost of housing (rents), this depresses housing prices. Based on this mechanism, Favilukis, Ludvigson, and Nieuwerburgh (2017) argue that domestic factors in the form of financial liberalization are ultimately responsible for the run-up in US house prices, not international capital flows.

Very different from Ferrero (2015) and Favilukis, Ludvigson, and Nieuwerburgh (2017), Justiniano, Primiceri, and Tambalotti (2014) show that introducing a realistic model of risk taking in the banking sector substantially strengthens the role of capital inflows for house prices in a quantitative model of the US housing boom. In particular, their model allows for the existence of both domestic and foreign banks that refinance themselves in the US money market. Inflows of foreign capital generate declining interest rates which in turn improve refinancing conditions for both types of banks. US banks directly invest into mortgage lending but they also securitize mortgage loans which are sold to foreign investors and to foreign banks. This setup realistically mimics a rise in the gross positions

of foreign banks (which borrow safe in the US market and then buy risky mortgage-backed securities with these funds) that left foreign banks' net positions largely unchanged. This phenomenon was first documented by Shin (2012) who dubbed it the "banking glut". Foreign banks in the model effectively increase the intermediation capacity of the domestic (US) financial system. It is this feature which amplifies the impact of capital inflows in their model and Justiniano, Primiceri, and Tambalotti (2014) find that the savings glut can account for around one fourth to one third of the run-up in house prices over the period prior to the GFC.

While the above papers are either quantitative-theoretical in nature or provide reduced-form evidence, a range of papers has also provided tightly identified econometric evidence on the house price-capital inflow link in the United States. Sá and Wieladek (2015) is the first paper using structural vector-autoregressive (SVAR) methods in this branch of the literature. Sá and Wieladek derive robust sign restrictions from a two-country DSGE model in the mould of Ferrero (2015). They then use these restrictions to identify a large-scale VAR estimated from quarterly US data over the period 1979-2006. Specifically, they distinguish between domestic (US) and rest-of-the-world (RoW) monetary policy shocks, a savings glut shock, and a financial liberalization / preference (i.e. credit demand) shock. Both the savings glut and the financial liberalization shocks are identifed as decreasing consumption in the RoW, deteriorating the current account, and appreciating the real exchange rate. In addition, the financial liberalization shock is assumed to increase US consumption and to drive up long-term interest rates, while the savings glut shock lowers long-term interest rates. A first interesting result is that both monetary policy shocks have next to no bearing on house prices in their econometric specification. Secondly, both the savings glut and the domestic credit demand (financial liberalization / preference) shocks are both found to have significant and sizable effects on house prices.

While the aforementioned studies mainly focus on time-series evidence, a more recent literature has also begun to exploit intranational variation in both house price dynamics and financial openess across regional economies in the US to study the link between credit supply, house prices and capital inflows. Specifically, the papers by Favara and Imbs (2015), Hoffmann and Stewen (2020), Mian, Sufi,

and Verner (2020) and Hoffmann and Stewen (2020) all exploit the natural experiment of US state-level banking deregulation during the 1980s and 1990s to study the causal impact of financial liberalization on house prices. Favara and Imbs (2015) use the gradual reduction in bank branching restrictions in the late 1990s as an instrument for bank credit supply, showing that financial liberalization was indeed causal for house prices. The gradual removal of state-level branching restrictions was however one of the last steps in a long chain of state-level banking liberalizations that started already in the 1980s. Mian, Sufi, and Verner (2020) focus on liberalizations during the 1980s. They put forward a stylized model similar to the one in section 2 above in which a financial liberalization can relax the borrowing constraints of households as well as of firms in the tradables and non-tradable sectors. In their model, a financial liberalization that only relaxes firms' borrowing constraints does not affect the sectoral composition of the economy and has no effect on house prices, while a relaxation of credit standards for households leads to higher consumption of both tradables and non-tradables, to a household credit boom and higher prices. Their empirical results show that state-level liberalizations during the 1980s were a key driver of the housing booms and busts that many states experienced during the 1980s and early 1990s and therefore conclude that state-level banking liberalization indeed predominantly acted as an expansion to household credit supply.

Savings glut or financial liberalization? The interplay between credit supply factors The papers by Favara and Imbs (2015) and Mian, Sufi, and Verner (2020) are not directly concerned with international capital flows. Still they fall in line with the contributions by Favilukis et al. (2013) and Ferrero (2015) that have emphasized that domestic financial liberalization was the key factor behind the US housing boom and bust. Liberalization actually unlocked credit demand by previously credit-constrained households, thus also leading to increased borrowing from abroad. In this narrative, the correlation between house prices and capital inflows is incidental, driven by a common cause which is financial liberalization. In quantitative models and empirical work in this spirit, once financial liberalization is controlled for, exogenous components of capital flows (as well as monetary policy) generally account for only a negligible part of the US housing boom.

The financial liberalization view of the US housing boom and bust is intellectually attractive be-

cause it can easily explain both the boom and the bust. In this reading, the crash is just another credit boom gone bust (Schularick and Taylor (2012)) in which financial liberalization leads to excessive lending and instability in the banking sector. By contrast, a simple version of the savings glut hypothesis in which exogenous capital inflows drive the boom would require a sudden stop in capital inflows to explain the crash. While the US current account deficit narrowed during the crisis, it is clearly not consistent with the facts to interpret this as a sudden stop in international capital flows. The US as whole never had a problem in refinancing itself during this period. Also, most models of a sudden stop would imply a rise in interest rates during a crisis while US and global interes rates fell to unprecedented lows after 2007. Another challenge the savings glut view has to confront is that the glut of savings from China and other emerging economies really was a demand mainly for US treasuries, not mainly for risky assets such as housing or mortgage-backed securities, the markets for which were at the epicentre of the crash.

While this reasoning suggests that domestic financial factors must play a role in any attempt to understand the US housing market in the first decade of the 21st century, the savings glut view remains attractive because it helps address some of the less discussed shortcomings of the financial-liberalization view. First, the savings-glut hypothesis can easily adress how the additional credit demand created by financial liberalization could be financed without a major increase in US interest rates: by a very elastic supply of foreign capital. Second, the savings-glut hypothesis can explain the timing in the boom and bust in US housing markets. The major waves of financial liberalization—the opening of state banking markets, the rise of mortgage building societies and the increasing use of securitization—preceded the housing boom by at least decade. However, the boom clearly coincides with the entry of China into the world economy and with the increased accumulation of foreign reserves by many emerging markets following the Asian financial crisis.

Against this backdrop, Hoffmann and Stewen (2020) argue that financial liberalization and a very elastic global supply of capital—the savings glut—mutually reinforced each other in the US housing boom–consistent with the model in section 2. Their paper exploits the staggered timing of the wave of state-level banking liberalizations during the 1980s to show that states that liberalized earlier saw

larger housing booms between 1997 and 2005 and larger busts thereafter. House prices in earlier-liberalized states are shown to be more strongly correlated with US wide capital inflows even after controlling for a range of other credit supply factors and indicators of monetary policy tightness.

To explain these stylized facts, Hoffmann and Stewen (2020) propose a simple value-at-risk (VaR) model of banks portfolio management to show that geographically more diversified–and therefore notionally safer–banks will be able to expand their lending more in response to any positive refinancing shock. They then corroborate this prediction in granular county-level mortgage lending data from the Home Mortgage Disclosure Act (HMDA) data base. Again controlling for a range of factors affecting banks' refinancing conditions, such as alternative credit supply and monetary policy factors, they find that mortgage lending of geographically diversified banks is more responsive to capital inflow shocks than that of local banks.

Hoffmann and Stewen (2020) argue that state-level banking liberalization mostly took place on a mutual reciprocal basis, so that banks in early-liberalized states had ample time to enter other geographical markets all while out-of-state banks from other liberalized states had opportunity to enter these liberalized markets. As a result, early-liberalized states had a stronger presence of geographically diversified banks a decade after the wave of state-level liberalizations, when capital inflows into the US started to surge after 1997. This explains why early-liberalized states saw larger credit expansions and higher house price increases in response to these capital inflows.

To my knowledge, the study by Hoffmann and Stewen (2020) remains the only one to exploit the geographical heterogeneity in deregulation histories within the US to study the causal impact of aggregate US capital inflows. The results show that deregulation left a long shadow in time and thus provide a possible reconciliation between the financial liberalization and savings glut views of the US housing boom. As discussed before, financial deregulation alone cannot easily explain the timing of the housing boom, nor its severity. Globalizing world capital markets and the entry of new actors such as China on the world economic stage therefore remain plausible explanations for why there was suddenly such an inelastic global supply of capital to fuel the US housing boom.

The theoretical and empirical results in the papers by Shin (2012), Justiniano, Primiceri, and Tam-

balotti (2014), and Hoffmann and Stewen (2020) also help fill a gap in the logic underlying the simplest version of the the savings glut hypothesis: its inability to explain how global reserve demand for US safe assets can account for the increase in the price of a risky asset, housing. While the increase in reserve holdings by emerging economies indeed largely flowed into US treasuries, the papers above all emphasize that the demand it displaced was largely absorbed by an increased supply of surrogate safe assets: US banks increasingly securitized mortgage loans which were sold to foreign banks and investors who largely considered them as close substitutes for safe US government debt. Indeed, as emphasized by Shin (2012) and Hoffmann and Stewen (2020), securitization and geographical diversification made banks' balance sheets notionally safer, thus providing depositors in the US banking system with a substitute for sovereign debt.[1]

Clearly, it appears plausible that it was the financial liberalization of the decades prior to 2000 itself that increased the ability of the US financial system to provide private-label quasi-safe assets. Conversely, the global savings glut created a demand for US safe assets that may in turn have spurred further domestic liberalization to allow the US financial system to become even more elastic in its supply of surrogate safe assets. This interaction between financial liberalization and the global supply of capital remains underresearched but it seems essential for a full picture of the US housing boom of the early 2000s and of the subprime crisis.

Credit demand: monetary policy and housing preference shocks While the literature surveyed so far focused on domestic or international credit supply, various kinds of domestic credit demand shocks are also likely to have affected US house prices and capital inflows. One key candidate are monetary policy shocks, which in models with domestic financial frictions, such as collateral constraints, have been shown to have a potentially powerful impact on house prices. This vast literature has been intellectually very influential (see Iacoviello 2005; Monacelli 2009; Calza, Monacelli, and Stracca 2013 for prominent examples), but it is not my focus here because, with few exceptions,

[1] This contrasts with the results in Favilukis, Ludvigson, and Nieuwerburgh (2017) who conclude against the potential of the savings glut to explain the rise in US house prices because in their setting the supply of safe assets is inelastic so that an exogenous increase in the demand for safe assets could only be absorbed by a rise in the risk premium (and thus a drop in prices) for risky housing.

it has treated the US as a closed economy and because even in an open-economy setting low monetary policy rates themselves cannot easily account for high house prices and large capital inflows simultaneously.[2]

A number of papers have explored the role of sudden preference shifts in favor of housing and of irrational exuberance in house price expectations for our understanding of the house price–capital flow nexus. Both Punzi (2013) and Gete (2009, 2020) show that preference shocks can generate a negative correlation between house prices and exchange rates, consistent with our model in section 2 above. However, as argued by Adam, Kuang, and Marcet (2012), the magnitude of house price booms seen during the early 2000s is not easy to reconcile with the size of macroeconomic shocks during that period. Using an estimated DSGE model, In't Veld et al. (2011) conclude that house price increases during the period were hard to explain without a bubble component. Conversely Adam, Kuang, and Marcet (2012) argue that a model in which consumers hold near-rational but heterogeneous expectations but do not fully understand how house prices are formed can account for the large house price reactions to capital inflows during the pre-2008 period.

Credit demand and house prices: identified evidence from the China trade shock The papers discussed in the previous paragraphs all focus on country-wide credit demand shocks. Relatively few papers by contrast have exploited regional heterogeneity in credit demand to identify the joint causal effect of local credit demand shocks on house prices and capital flows. Two studies by Barrot et al. (2022) and Hoffmann and Ruslanova Habibulina (2024) interpret the China trade shock (Autor, Dorn, and Hanson 2013) as local credit demand shocks to regional economies in the US. Barrot et al. (2022) show that local labor markets which were more exposed to import competiton from China saw larger increases in household debt as households attempted to smooth consumption. These increases were driven by mortgage equity extraction and concentrated in areas with high house price growth. Hoffmann and Ruslanova Habibulina (2024) argue that housing markets and inter-regional capital flows played a key role in the response of local economies to the China trade shock. Besides the local

[2] See my discussion of Ferrero (2015) above who argues that low US monetary policy rates went in hand with inflows only because emerging economies effectively pegged their exchange rates to the dollar.

variation in import exposure, they build on Hoffmann and Stewen (2020) to also exploit the regional variation in de facto-levels of banking integration. They show that households in financially more open regions found it easier to borrow for consumption smoothing. Better consumption smoothing in turn implies that demand for local non-tradable goods, and in particular for housing, was stabilized. This in turn kept the marginal product of labor in the local non-tradable sector high, facilitating the reallocation of labor away from the import-exposed manufacturing to the non-tradable sector. Consistent with this mechanism, Hoffmann and Ruslanova Habibulina (2024) find that financially more open local economies in the US saw a swifter reallocation of labor away from manufacturing and into non-tradables after the deterioration of the local terms of trade associated with the income shocks. As a result local incomes were less persistently affected and unemployment increased less.

4 International evidence

So far, this survey has focused on the United States experience—and with good reason: the US housing market was the epicenter of subprime crisis and capital flows figured prominently in its genesis. However, as the subprime crisis spread internationally and morphed into the global financial crisis, it quickly became apparent that other countries that prior to 2007 had also seen major housing booms might share vulnerabilities similar to the US.

Furthermore, Reinhart and Rogoff (2008) showed early on that international historical evidence could help understand the US experience. They argued that the subprime crisis followed the typical template of an emerging market boom and bust: financial liberalization triggers a wave of capital inflows that finances a consumption and house price boom. Lax financial supervision in weakly regulated parts of the financial system—in this case the subprime segment of the US mortgage market—then leads to the built-up of imbalances and systemic risk in the financial sector that self-corrects in a major crisis. Researchers therefore turned to cross-country variation to understand the driving factors and the causal direction of the house price—capital flow link.

In my review of the international evidence I find it convenient to classify studies into two broad

(and not strictly mutually exclusive) groups. The first group includes studies that use cross-country data to examine how variation in country-level characteristics (e.g. in the stance of macroprudnetial regulation) affects the house price–capital flow link in a given country. The second group consists of analyses that look for common factors in international capital flows to understand international comovement in house prices.

4.1 Cross-country studies

Aizenman and Jinjarak (2009) offer the first systematic exploration of the cross-country correlation of house prices and capital inflows in this post-GFC literature. For the period between 1990 and 2005 and based on a sample of more than 40 countries, they document a very robust correlation between house prices and lagged current account deficits that survives a range of controls for local financial development, institutional quality, real interest rates, growth expectations and population dynamics. They also instrument capital inflows, arguing that capital inflows are indeed causal for house prices. These findings broadly support the view that international credit supply factors account for the cross-country correlation illustrated in Figure 1.

A range of international comparative studies use VAR techniques to analyze the impact of capital inflow shocks on house prices. Cesa-Bianchi, Ferrero, and Rebucci (2018); Cesa-Bianchi, Cespedes, and Rebucci (2015) provide panel VAR evidence based on 33 countries for the period 2000-2012. To identify an exogenous capital inflow shock they construct a global liquidity aggregate based on cross-border interbank lending and they corroborate their results using an external-instrument VAR approach based on Mertens and Ravn (2013). They find that in emerging markets, house prices are considerably more sensitive to global liquidity shocks and that the transmisison of these shocks differs markedly between advanced and emerging economies. In advanced economies global liqudity shocks increase predominantly the collateral value of housing and thus domestic borrowing capacity. Conversely, in emerging economies, the impact of liquidity is predominantly modulated through the real exchange rate, thus affecting the international borowing capacity of the economy. This finding can help explain why the unconditional correlation between house prices and capital inflows is generally

found to be stronger in data for emerging economies.

Sá, Towbin, and Wieladek (2014) also provide panel VAR evidence, but their focus are differences in the the domestic financial structure of developed economies. Based on sign restrictions, Sá, Towbin, and Wieladek (2014) identify capital inflow shocks assuming that capital inflows increase consumption and (non-residential) investment, deteriorate the capital account, lower domestic and foreign (long-term) real interest rates and lead to an appreciation of the real exchange rate. Their panel VAR also explicitly allows for country heterogeneity by allowing its coefficients to vary as a function of the respective country's mortgage market development and the degree to which securitization is allowed. They find a significant impact of capital inflow shocks on house prices and, importantly, this effect is stronger for countries with deeper, more developed mortgage markets and in which securitization is allowed.

Tillmann (2013) builds on the sign-restriction approach of Sá, Towbin, and Wieladek (2014) and explores the role of international push factors—capital inflow shocks—in a sample of East Asian economies in the period after the Asian financial crisis of the late 1990s. He finds a significant and sizable impact on house prices with a one percentage point decrease of the current account-to-GPD ratio being associated with a 0.5 percent increase in real house prices, an effect that is twice as large as that estimated by e.g. Sá, Towbin, and Wieladek (2014) for OECD countries. Still, Tillmann finds that overall only a limited fraction of the total variability in house prices—around 15%—is explained by international push factors, including capital inflows. Furthermore, different from Sá, Towbin, and Wieladek (2014), he finds that heterogeneity in terms of the responses of national housing markets in his sample of East Asian countries is not mainly explained by differences in the structure of their mortgage markets but rather by differences in macro policies, mainly monetary policies.

Cesa-Bianchi, Ferrero, and Rebucci (2018) extend the findings in Cesa-Bianchi, Ferrero, and Rebucci (2018); Cesa-Bianchi, Cespedes, and Rebucci (2015) by providing a stylized model of of international credit supply shocks. In line with their model, they find that international credit supply shocks lead to consumption booms, drive up housing and asset prices, and are associated with deteriorating current accounts and appreciating real exchange rates. They report these effects to be more

pronounced in economies with a high share of foreign-currency borrowing and with laxer domestic mortgage lending standards.

Banti and Phylaktis (2019) use a panel VAR to show that shocks to liquidity (in their case measured as the supply of repurchase agreements by central banks) for US, UK and European banks have an impact on house prices globally. Different from the aforementioned studies, the authors are concerned with the question to what extent domestic policies—monetary policy but also macro-prudential measures—can dampen the impact of global liquidity shocks. They find that monetary policy and global shocks account for roughly the same percentage of the variation in house prices, suggesting that monetary can at least in principle be quantitatively effective in shielding domestic housing markets from global shocks. Using an interaction-VAR approach similar to Sá, Towbin, and Wieladek (2014), they show that macro-prudential measures directly targeted at housing markets are quite effective in dampening the impact of global liquidity on housing markets in advanced economies while broader measures targeted at banks and credit growth are found to be relatively more prevalent and effective in emerging economies. Davenport, Sá, and Wieladek (2024) revisit the analysis Sá, Towbin, and Wieladek (2014) on a post-2013 sample and find that the response of house prices to capital inflow shocks to be more muted than in their original pre-GFC sample, in particular in countries with the strictest macro-prudential policies.

Boddin et al. (2025) analyze the impact of portfolio capital flows during the euro crisis on house prices in eurozone countries. Specifically, they exploit ECB governor Draghi's "whatever-it-takes" speech in summer 2012 as an exogenous shock that triggered capital inflows into the eurozone periphery. Using data from the European Central Bank's cross-country household portfolio survey, they show that these inflows are associated with an increase in the average household portfolio share of housing and that this increase was larger for wealthy households and those with higher ex ante portfolio shares of bonds and equities. They interpret these findings in the context of a stylized model of household portfolio choice in which capital inflows lead to a decline in the expected return of bonds and equities which in turn induces households to rebalance their portfolio towards housing. While their results are the first to document the empirical relevance of such a household portfolio

reallocation channel for house prices, the theoretical mechanism can be understood as variant of the mechanism studied by Favilukis, Ludvigson, and Nieuwerburgh (2017). In Favilukis, Ludvigson, and Nieuwerburgh (2017), the savings glut is an exogenous foreign demand shock for US safe assets. Equilibrium requires the price of the risky asset (housing) to fall (and its expected return to rise) to induce locals to sell safe assets and buy housing. In the setting of Boddin et al. (2025), by contrast, the foreign capital inflow shock reflects an increased demand for liquid (and internationally traded) domestic risky assets that triggers the rebalancing towards housing.

4.2 Capital flows and international house price comovement

A number of studies surveyed above, notably Cesa-Bianchi, Ferrero, and Rebucci (2018); Cesa-Bianchi, Cespedes, and Rebucci (2015), and Banti and Phylaktis (2019) document the importance of a common factor—global liquidity—driving capital flows and house prices. These papers make contact to the somewhat separate literature on the Global Financial Cycle (Rey, 2013) which documents a considerable cross-country comovement in international capital flows and shows that this comovement is mirrored in international asset prices. One implication of these findings is that house prices should show a considerable degree of international comovement.

In this context, it is quite important to distinguish between trend and cycle comovement in house prices. While the literature documents considerable international commonality in house price trends (Ahir and Loungani (2020) and Knoll, Schularick, and Steger (2017)), findings for international co-movement between house price cycles–the components most likely to correlate with capital inflows—are more mixed.

Jordà et al. (2019)show that the international correlation of house price growth has increased somewhat in the last decades but that it shows no clear trend in a century-long perspective. Also, international house price correlations remain much lower than correlations between financial assets such as equity which have soared in the last 30 years. Furthermore, the correlation in house prices seems time-varying so that it appears relatively diffcult to identify a single global house price cycle.

Focusing on the period after 1990, Hirata et al. (2013) and Alter et al., 2018 document an increase

in international house price comovement. Hirata et al. (2013) estimate factor models for house prices, equities, credit and output and find that global factors explain about 35 percent of house price movement across a sample of advanced economies, up from around 20 percent in the pre-globalization (pre-1990) period. Using the global factors extracted from these four variables in a factor-augmented VAR (FAVAR), they then move on to identify structural shocks driving these factors. They conclude that neither monetary policy nor credit shocks can explain the rise in international price movements. Conversely, they find that uncertainty shocks account for up to a third of the variation in the global factor of house prices. Alter et al., 2018 also document a steady increase in the comovement of house prices after 1990 but, somewhat different from Hirata et al. (2013), find that financial openness and bilateral bank integration are important drivers of house price synchronization in their sample of advanced and emerging economies. These differences in results could partly be explained by the fact that Alter et al., 2018 predominantly focus on pairwise- bilateral synchronization and use measures of house price comovement based on the log-levels of variabels whereas the factor models by Hirata et al. (2013) model the average (across country-pairs) comovement of quarterly growth rates.

The fact that house prices are much less correlated across countries than financial assets and that their correlation is time-varying does not contradict the findings of the aformentioned work on the global financial cylce that suggest that house prices are internationally correlated *conditional* on global liquidity shocks. Many country- or location-specific demand factors and policies are likely to affect house prices. Furthermore, global factors may vary in their volatility, suggesting that the correlation could indeed be time-varying even in the presence of global push factors.

At this juncture, it is instructive to refer once again to the quasi-natural experiment of US state-level deregulation. Morgan, Rime, and Strahan (2004) provide a simple model in which banks operate internal capital markets across different geographical locations and which provides a useful reference point to think about the correlation between capital flows and house prices. Their focus is the impact of state-level banking liberalization on the synchronization of business cycles, but their framework is directly applicable to any outcome that is sufficiently directly related to fluctuations in lending, such as housing prices. Morgan, Rime, and Strahan (2004) show that if credit demand shocks dominate,

then integration will actually lower the correlation of lending (and business cycles). Synchronization is only expected to increase if credit supply shocks are the dominant source of fluctuations in lending. The intuition of their framework is simple but powerful: in an integrated banking market, interest rates will equalize. A negative credit demand shock in region A will decrease local interest rates, leading banks to move their lending to region B. This ensures that interest rates are equalized but lending in region A drops more than it would have under autarky (in which case a drop in interest rates would have dampened the drop in demand), while it increases (rather than staying flat in region B. Hence, lending is less synchronized between regions the two regions than under autarky. Conversely, an idiosyncratic negative credit supply shock in one region will be dampened by inflows from the other region, again arbitraging any interest rate differential. In this case, lending pattern will be more symmetric than under autarky.

Building on this fundamental insight, Landier, Sraer, and Thesmar (2017) examine the impact of banking liberalization on the synchronization of house prices across US federal states. They find that the interstate integration of banking markets is associated with a significant increase in house price comovement at business cycle frequencies and they identify the increased geographical correlation of bank lending patterns as the driver of this increase. Liberalization opens local markets to banks with lending activities in other states. If lending fluctuations are predominantly driven by bank-specific credit supply shocks, this increases the correlation of mortgage lending and thus of house prices across states.

Ehlers, Hoffmann, and Raabe (2025) adapt and expand the framework by Landier, Sraer, and Thesmar (2017) to study the impact of international banking flows on time variation of pairwise house price correlations across a panel of advanced and emerging economies between 2000 and 2020. Specifically, their focus is the role of non-US global banks in transmitting dollar refinancing shocks to lending and housing markets worldwide. Cross-border lending by globally active banks outside the US is exposed to the risk of sudden dollar appreciations. This is because non-US global banks have two costly options to fund dollar lending. First, they can use synthetic funding, committing their own domestic (e.g. euro) deposit base. Regulatory constraints require that such lending is hedged, which is

costly. Conversely, non-US global banks can raise dollar funds directly in US wholesale funding markets. But this exposes the aggregate, world-wide balance sheet of the bank to unhedged exchange rate risk (because, eventually the bank has to satisfy its home depositors and shareholders in euro). Ehlers, Hoffmann, and Raabe (2025) provide a stylized model in which banks optimally trade off the cost of indirect (synthetic) and direct (wholesale) dollar funding. The higher the costs of synthetic finance (as measured by the bilateral treasury basis between the banks home currency and the dollar), the more the bank will rely on direct dollar funding, making it more exposed to dollar appreciations. Ehlers, Hoffmann, and Raabe (2025) show that the dollar cycle—the effective rate of appreciation of the dollar against all major currencies—is major common factor driving house price growth in advanced and emerging economies and that the exposure of a country's housing cycle depends on what they call 'dollar dependence', i.e. the extent to which the lenders of this country are themselves exposed to dollar funding shocks. Importantly, the framework proposed by Ehlers, Hoffmann, and Raabe (2025) can account for the time variation in pairwise house price correlations. Because the exposure of lender banking systems to dollar refinancing shocks varies over time (due to idiosyncratic variation in the bilateral treasury basis) and because the composition of a pair of borrower country's lenders changes over time, so does their joint exposure (called dollar-codependence) to shocks in the dollar exchange rate and, thus, the pairwise correlation of cross-border lending and house prices.

5 The roles of foreign buyers and of migration

The entire literature surveyed so far—as well as the model in section 2—assume that capital is internationally mobile while people are not and that the local housing stock is entirely owned by local residents. These assumptions are probably not too restrictive as long as the aim is to understand the link between capital flows and housing markets at the level of an entire country. But housing markets are clearly heterogeneous across cities even within the same country. The urban economics literature clearly documents the rise of so-called superstar cities which attract the most productive workers, not only from within the country in which the superstar city is located but also internationally (Gyourko,

Mayer, and Sinai 2013; Deng, Qin, and Wu 2019). Foreign buyers and migrants often move to the most international cities and to cities and regions where there is already a sizable population of their own national or ethnic origin. When people move, they often bring capital with them. Last but not least, housing in countries and cities that are considered international safe havens, tends itself to turn into a safe haven asset that may attract inflows of foreign capital by wealthy foreign investors even though these investors may not be migrating directly or may only be using their residences part-time. While this last mechanism is likely to affect mainly the top segment of the market, in global cities where the supply of housing is highly inelastic, this mechanism may still have first-order effects on house prices more broadly. In this section, I therefore survey a recent, still nascent but quickly growing literature that emphasizes the interaction between foreign buyers, migration and capital flows in housing markets. It largely does so by focusing on within-country heterogeneity in exposure to international migration (Deng, Qin, and Wu 2019).

Badarinza and Ramadorai (2018) offer what is probably the earliest contribution to this literature by documenting a flight-to-safety pattern in the London housing market. Using granular transaction-level data on house prices, they show that house prices react to foreign political risk. To causally identify this link, they exploit variation across London neighborhoods in the share of foreign population that originates from a given foreign country. They then show that a rise in political risk in a foreign country is associated with higher transaction prices in neighborhoods where the share of population from this country is particularly high. One particular original aspect of their study is that to it overcomes the lack of granular capital flow data by using past migration patterns to construct a shift-share instrument which is valid under the identifying assumption that foreigners tend to have preferred habitats when buying London property (i.e. neighborhoods where their own nationality is already strongly represented). This "home bias away from home" approach points the way on how to analyze the link between housing and capital flows at a much more granular level. While transaction-level house price data are available for many cities and countries, capital flows at the investor or even transaction-level usually are not. It is therefore not surprising that the approach by Badarinza and Ramadorai (2018) has by now spawned an entire literature that analyses the heterogeneous impact of

foreign buyers on house prices in different locations within the recipient country.

Bednarek et al. (2021) explore the impact of capital inflows on German city-level house prices and economic activity. They use the eurozone crisis as a natural experiment, during which capital flight from southern Europe led to a surge of capital inflows into the German banking system. They show that this capital inflow shock led to higher real estate price increases and higher GDP growth in cities with particularly tight housing markets. To measure housing market tightness, they exploit regulatory variation created by German law that assigns refugees to German cities based on a pre-determined rule that accounts for city-size, economic activity and other city-level characteristics. When the inflow of refugees into Germany surged in 2015, after the beginning of the Syrian civil war, this considerably tightened local housing markets. Bednarek et al. (2021) find that the capital inflow shock in particular eased credit conditions for—and increased the output of—firms which owned a lot of real estate in cities with tight housing markets, where house prices and thus collateral values increased most.

Li, Shen, and Zhang (2024) document a China shock in the US housing market. In 2008, China loosened international capital outflow controls while at the same time imposing home purchase restrictions in its domestic market. Using home purchase transaction data for California for the period from 2001-2013, Li, Shen, and Zhang (2024) show that the value and the number of cash transactions by ethnic Chinese buyers in the Californian market increased dramatically. The fact that these increases occur in cash transactions and the share of cash transactions in all transactions by ethnic Chinese considerably exceeds the share of cash purchases by the population on average suggests that these are purchases by non-resident buyers. Similar to Badarinza and Ramadorai (2018), the authors find that these purchases are concentrated in cities and areas with a previously high share of ethnic Chinese residents and that they increase local house prices and employment, mainly in the non-tradable sector. The authors also find that the number of tax returns in an affected neighborhood declines, which suggests that the influx of foreign capital into local housing markets displaces local residents and that the foreign buyers do not generally reside full time in their acquired properties.

Gorback and Keys (2020) argue that the introduction of foreign-buyer taxes by third countries such as Singapore diverted Chinese buyers towards the US. They use the local variation in demand

created by this diversion (and the assumption of home bias away from home) to estimate supply elasticities for local housing markets in the US. They find estimated supply elasticities to be extremely low, which can explain the large price effects that demand by foreign buyers is generally found to have in this literature. These findings seem consistent with the view that foreign buyers tend to look for safe havens, implying that their demand deliberately gravitates towards super-star locations where supply is hard to increase.

While the aforementioned studies very persuasively show the impact of foreign demand on local house prices, the Badarinza and Ramadorai (2018) approach does not generally allow to make the link between house prices and capital flows tightly, because capital flows are not generally directly observable at the local level.[3] A number of recent studies have started to address this issue.

Barcelona, Converse, and Wong (2021) show that the housing demand by Chinese buyers correlates strongly with aggregate capital inflows into the US. They estimate that capital inflows induced by the purchaes of Chinese buyers can account for a significant fraction of the official errors and omissions in the US balance of payments.

In the United Kingdom, a lot of wealthy foreign buyers in the UK use shell companies to buy local property. Sá (2025) therefore uses property deeds by foreign shell companies from the UK land registry as a directly observable measure of capital flows. She shows that these capital flows correlate strongly with the Badarinza and Ramadorai (2018) shift-share variable which allows her to us ethe latter as an instrument for capital flows, all while extending their analysis to the whole of the United Kingdom. Her analysis reveals that the impact of foreign buyers is indeed strongest for the most expensive properties but is significant over the entire house price distribution.

6 Epilogue: where do we go from here?

The past twenty years have witnessed an unprecedented globalization of real estate markets, including those for private housing. In the run-up to the global financial crisis, policymakers became increas-

[3] As shown by Hoffmann and Stewen (2020), local mortgage lending is highly correlated with capital flows. However, local mortgage lending is likely to be a poor proxy of the direct capital flows induced by foreign buyers who are often wealthy and pay in cash without using credit.

ingly concerned with the role of international capital flows in driving housing markets. As I have tried to emphasize in this paper, the period before and after the global financial crisis was, however, likely special. An unprecedented coincidence of global capital flowing "uphill"—-i.e. from emerging to developed economies—coincided with an equally unprecedented wave of financial liberalization within the United States and a global relaxation of lending standards. While global push factors were probably important, domestic regulation amplified their effect. Plausibly only the confluence of these two factors can account for the surge of the cross-sectional and time series correlation between house prices and capital inflows that Figures 1 and 2 documents for the 2000s and early 2010s.

Consistent with this interpretation, Figure 1 also shows that the capital flows–house price link appears a lot more muted in the last decade and a half, during a period when the re-regulation of the financial sector effectively contained growth in international capital (notably banking) flows and dampened their domestic impact through macro-prudential policies. Where does that leave us? Was the globalization of housing markets a chimera?

The analogy with the globalization of equity markets provides an interesting comparison. Very much as financial globalization has generally increased the international comovement of equity prices without synchronizing them perfectly, the same is to be expected for housing markets. One could argue that housing markets will always remain much more subject to local-specific shocks than equities. That is likely true, but note also that the increase in stock market comovement over the last century has happened all while national equity portfolios have continued to display considerable home bias. The same is clearly the case in housing markets, where ownership (and the exposure of owners to risk) will remain predominantly local. As in equity markets, we should threfore expect that house price comovement varies in the cross-section and over time. As in equity markets, this is because global risk factors vary in their volatility and because, like stocks, housing markets vary in their exposure to these risk factors over time.

Much of the literature I have surveyed— implicitly or explicitly—focuses on various dimensions of this fundamental logic. Countries' international borrowing conditions are affected differently by shocks to global liquidity and so are their housing markets. The literature on the global financial cy-

cle has documented an enormous global synchronization in capital flows but these capital flows may focus on just several global cities or in cities with large migrant shares from specific nationalities—common factors, different exposures again. All of this is consistent with the link between capital flows and house prices at the aggregate (i.e. country) level actually being quite weak. In fact, as globalization proceeds, it could well become weaker as house price movements become more heterogeneous within countries when global inflows concentrate on some major cities while house prices in the hinterland remain subdued. As a result, house prices (and capital flows) could be more correlated between London, New York and Kyoto than between London and Leeds, New York and Nashville or Kyoto and Kagoshima.

Recent empirical work has started to use asset-pricing techniques to explain the the wide within-country variation of house price-rent ratios—the polarization between superstar cities and the hinterland (Amaral et al., 2024, 2025). Relative to rents, house prices are cheap in the periphery because local economies there are less diversified than in superstar cities, making ownership of a house riskier. Understanding the trade-off between risk and return in housing—the world's largest asset class—is an exciting endeavor that goes far beyond the scope of this article. But risk-return trade-offs are equilibrium relations und therefore must be underpinned by arbitrage flows of capital (and in housing markets likely also of people). An asset-pricing perspective on housing markets therefore also points a novel way towards a better understanding of the link between capital flows and house prices–both within and between countries.

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