



Shadows from the Past: Inflation and War

8.1 NO GOOD DEED EVER GOES UNPUNISHED

The basic story is rather simple and was already telegraphed in Chap. 7: the policy responses associated with the Pandemic, accommodated by monetary authorities until quite late on the game, created price pressures that led to the highest levels of inflation in almost two generations.

8.2 FISCAL SIDE EFFECTS

Let's add granularity to this synthetic narrative, starting with the fiscal side, or more precisely, with its effects on personal income. Economies rebounded rather fast (already by the third and fourth quarter of 2020 double-digit growth rates were being observed), while at the same time the provision of very large amounts of fiscal (and monetary) support continued well into 2021. At the same time, the supply chains stresses caused by the Pandemic lockdowns period equally persisted through 2021, causing widespread goods shortages, while disposable income and savings skyrocketed: too much money was chasing too few goods, and on both sides of the Atlantic (albeit to *very* different degrees). Namely, between January and April 2020, US savings jump by an astonishing \$5 trillion (a figure striking similar to the level of fiscal support provided), but the peak of disposable income will only be reached in March 2021—at the time of the ARPA package, see Table 7.1, reaching \$22 trillion (also around \$5

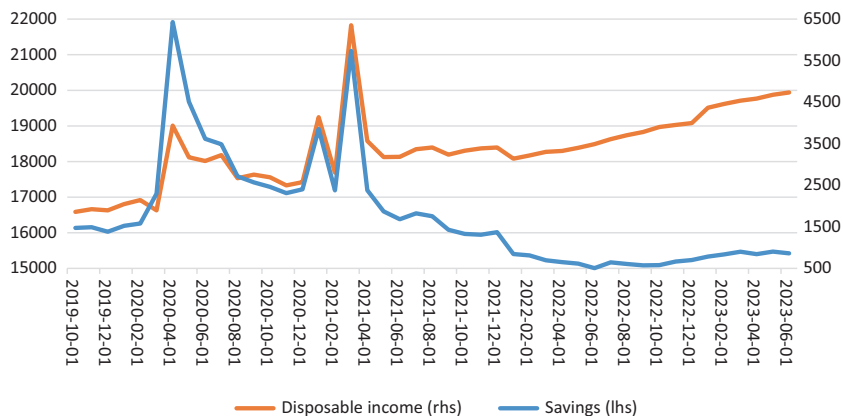


Fig. 8.1 Disposable income and savings (\$ billions). (Source: FRED)

trillion above the January 2020 level: Fig. 8.1). The US personal savings rate *more than trembles*, from slightly more than 9% in January 2020 to almost 34% in April (there will duly be a second peak in March of 2021, when it climbs to over 26%).

Equivalent figures in the euro area are of a completely different order of magnitude, even if the direction is similar: gross savings of households will peak at below €540 billion in mid-2020—which is less than €300 above their end-2019 value, and the savings rate peaks at 25% in mid-2020, up from 13.5% in 2019.

At the same time this was happening, widespread goods shortages were being felt across multiple sectors from the moment lockdowns were imposed in early 2020, in items as diverse as semiconductors and wood planks, as these policies disrupted the global and intricate supply chains painstakingly built during this “Second Globalization” era. This dynamic is well captured by the Global Supply Chain Pressure Index (GSCPI) of the New York Federal Reserve (Fig. 8.2)¹: this measure jumps from virtually zero to above three in a matter of weeks in early 2020.²

¹The GSCPI tracks the state of global supply chains using data from the transportation and manufacturing sectors. For a full description of the methodology, see GSCPI, New York Federal Reserve.

²The actual historical record of this series is in the fall of 2021, due to the renewed lockdowns imposed in parts of China by its Government, which was then pursuing a so-called Zero Covid policy (this policy was suddenly abandoned only in *December of 2022*, after waves of protest in that country against it).

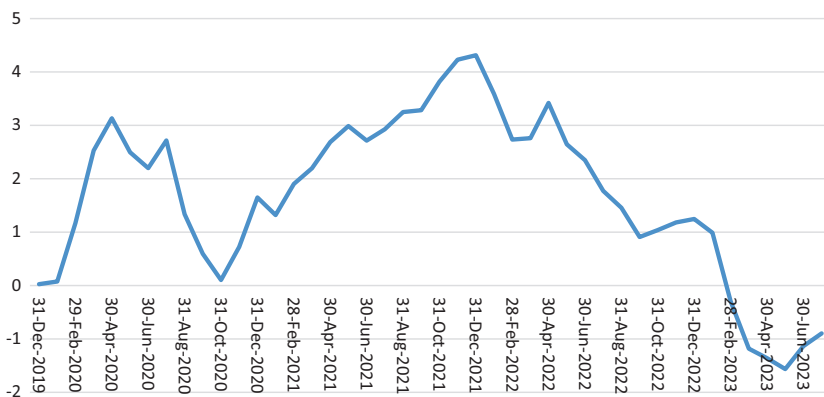


Fig. 8.2 Global Supply Chain Pressure Index. (Source: New York Federal Reserve)

Finally, the very sizable fiscal impulse described in Chap. 7 had rather limited supply effects (at least initially), so while it boosted demand there was very little increase in, say, domestic US production to compensate for these disturbances.

8.3 PRICE SIDE EFFECTS

This situation created (global) price pressures that were apparent already by end-2020 (and even earlier in some Emerging markets), and that will rage unabated until the fall of 2022 (Fig. 8.3).

The relation of those price pressures with the supply chain disruptions can be inferred from Fig. 8.4: it shows that they *precede* other price increases, including the energy-related ones (which started climbing already a **whole year before the Russian invasion of Ukraine in February 2022**).

More formally, attempts to quantify the different contributions of these components to the inflationary spike typically find a somewhat larger share for the fiscal impulse than the supply disruptions. For example, de Soyres et al. (2022) find that fiscal stimulus is responsible for 2.5 percentage points of the excess inflation in the US,³ 1.8 in the euro area, 1.6 in the

³ de Soyres, F., Santacreu, A. and Young, H. (2022), “Fiscal Policy and Excess Inflation During Covid-19: a Cross-country View”, FEDS Notes, Federal Reserve Board.

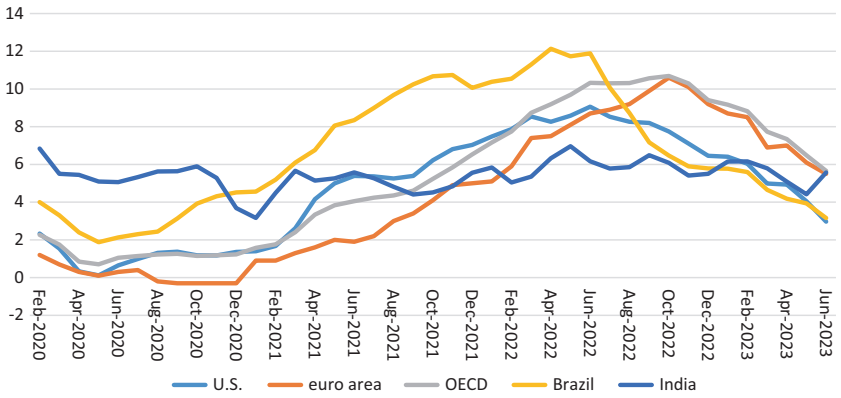


Fig. 8.3 Monthly CPI series. (Source: OECD)

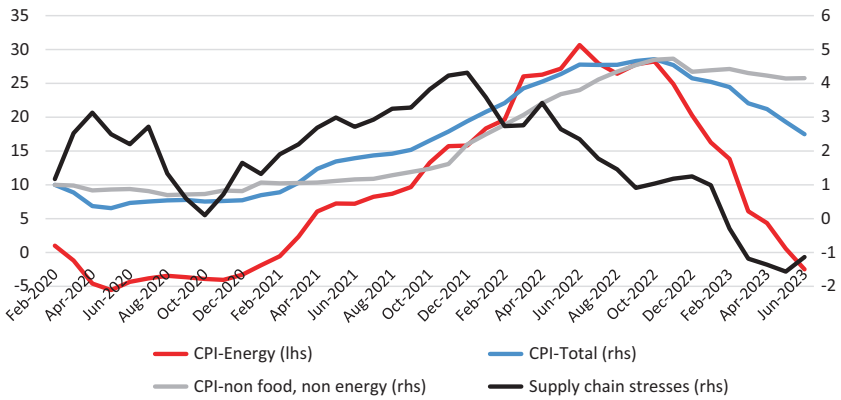


Fig. 8.4 Individual CPI items, whole OECD. (Source: OECD)

Table 8.1 Estimating the price effects of fiscal support^a

<i>Country/Region</i>	<i>Exposure type</i>	<i>Inflation contribution</i>
US	Domestic Effect	2.5
US	Foreign Exposure	0.5
UK	Domestic Effect	1.6
UK	Foreign Exposure	2.3
Euro area	Domestic Effect	1.8
Euro area	Foreign Exposure	0.8
Emerging markets	Domestic Effect	1.3
Emerging markets	Foreign Exposure	0.3

Source: de Soyres et al. (2022)

^aAggregates are constructed using real GDP weights. The Euro area comprise of France, Germany, Italy and Spain. Emerging markets comprise 32 countries using Federal Reserve Board country classifications

UK and 1.3 in Emerging markets (Table 8.1).⁴ They also estimate the indirect external effects of those domestic fiscal support packages on the trading partners of the countries that implemented them, and these can be quite significant for regions that are very open and that trade significantly with those partners (for instance, for the euro area, this is worth 0.8 percentage points of excess inflation, 0.35 of which comes from the US domestic fiscal support). As for the specific effects of supply chain stresses, Santacreu and LaBelle (2022) estimate, using a counterfactual model, that those could have added up to 20 percentage points to US PPI inflation.⁵

8.4 THE (INITIAL) MONETARY POLICY (NON) REACTION

As indicated in the earlier sections, the mechanisms of the inflationary spike are fundamentally rather traditional. A more puzzling aspect of this episode, however, is why monetary authorities *in Developed countries* did

⁴ di Giovanni et al. (2023) find comparable results for the importance of the fiscal support in the U.S. “excess inflation” during this period, and they also find that, *depending on the model used*, supply chains disruption can be even more important than the fiscal support as sources of excess inflation: see di Giovanni, J., Kalemli-Özcan, S., Silva, A. and Yıldırım, M. (2023), “[Quantifying the Inflationary Impact of Fiscal Stimulus Under Supply Constraints](#)”, NBER Working Paper 30892. Comin et al. (2023) also attribute roughly half of the US “excess inflation” to supply constraints (see Comin, D., Johnson, R. and Jones, C. (2023), “[Supply Chain Constraints and Inflation](#)”, NBER Working Paper 31179).

⁵ Santacreu, A. and LaBelle, J. (2022), “[Global Supply Chain Disruptions and Inflation During the COVID-19 Pandemic](#)”, Federal Reserve Bank of St. Louis Review.

not act earlier, and why they did not foresee the effects of those measures in the financial sector when they finally did act.

For instance, only belatedly, in March 2022—over a year after the beginning of the inflation spike, during which US CPI had gone from below 2% to almost 9%—did the Fed start a tightening cycle, then proceeding to raise its policy rate **11 times within a 16-month period**. Similarly, the ECB waited until mid-2022 for inflation to breach the 9% barrier, and only then started a cycle of **ten successive interest rate hikes** within a similar time span (the UK's BoE started with a series of quarter point moves in December 2021, which became larger only after August 2022, totaling 14 successive ones by the time of writing). For the Fed, Orphanides (2023) makes the case that this “policy mistake” (yes, another one) can be traced to **decisions regarding forward guidance on policy rates**: he is quite precise as to when this happened at the Fed, pinpointing the introduction of *outcome-based forward guidance* in the FOMC statements of **September 16, 2020**, which led to a shift toward a myopic approach to policy-making (he extends the same reasoning to the ECB).⁶

Unusually, Emerging markets, and notably central banks in Latin America, showed themselves to be more willing to start a tightening cycle (Fig. 8.5): for example, in a notable demonstration of how far it had gone since its hyperinflationary days, the CBB started raising rates as soon as inflationary signs appeared in the spring of 2021 (Fig. 8.6), persisting in an aggressive trajectory that ultimately led to a *real policy rate of 10%* even in face of significant political pressures from a newly elected left-of-the-center government. In the end, the CBB was rewarded with a turning of the price cycle faster than central banks in Developed economies, and

⁶Orphanides, A. (2023), “[The Forward Guidance Trap](#)”, Discussion Paper Series 2023-E-6, Institute for Monetary and Economic Studies, Bank of Japan, Tokyo. The corresponding section of the FOMC statement states the following: “The Committee expects to maintain this target range until it is confident that the economy has weathered recent events and *is on track to achieve* its maximum employment and price stability goals” (emphasis added).

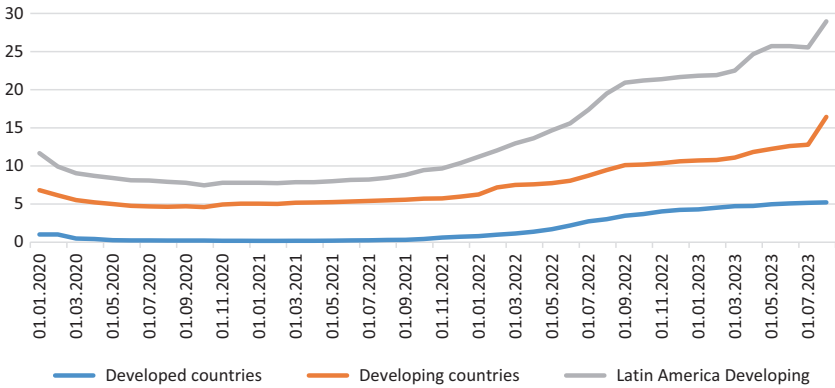


Fig. 8.5 Average policy rates, selected developed and developing countries
 Developed countries: Australia, Canada, Czechia, Denmark, Euro area, Hong Kong SAR, Hungary, Israel, Iceland, Japan, Korea, New Zealand, Norway, Poland, Romania, Sweden, Switzerland, UK, US. Developing countries: Argentina, Brazil, Chile, China, Colombia, Indonesia, India, Morocco, Mexico, Malaysia, Peru, Philippines, Russia, Saudi Arabia, Serbia South Africa, Thailand, Türkiye. (Source: BIS)

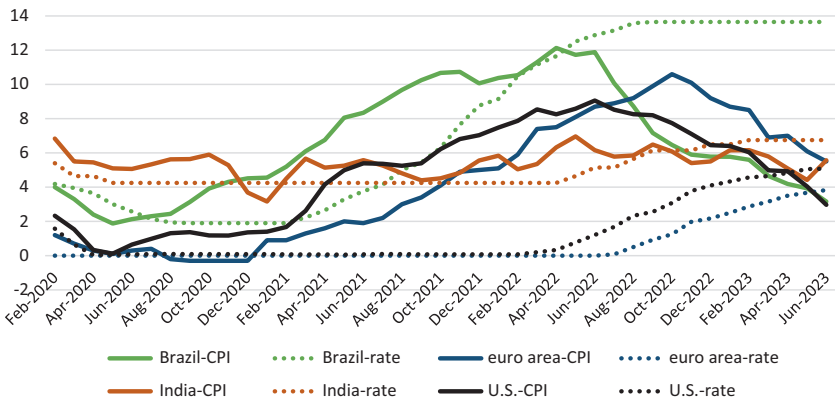


Fig. 8.6 CPI inflation and policy rates, selected countries. (Sources: OECD, FRED, CBB, RBI)

without experiencing external sustainability or banking stress episodes.⁷ Showing their greater institutional maturity, Developing countries may even have been (partially) forgiven from their “original sin”, successfully issuing domestic currency-denominated debt in the middle of a crisis.⁸

The fact that the combined effects of those hikes in Developed and Developing economies seem to have led to a containment of prices pressures worldwide by the summer of 2023⁹ does not preclude an examination of how policy makers found themselves in this predicament, and of what are the lessons these back-to-back crises since 2007 have for monetary policy going forward. This book will attempt some concluding thoughts on this in the next, and final, chapter.

⁷The resolution of three US banks, First Republic in May 2023 and Signature and Silicon Valley Bank in March 2023, which went under due to exposures that were described previously in Annex 5.B, led to another proposed revision of the US banking supervisory framework, see Federal Reserve (2023), “[Review of the Federal Reserve’s Supervision and Regulation of Silicon Valley Bank](#)”. However, other Fed statements suggest that a consensus strategy towards that aim was still in progress at the time of this writing (see Bowman, M., (2023), “[Responsive and Responsible Bank Regulation and Supervision](#)”, Federal Reserve Board, Washington). In one of the many ironies of history, former US Congressman Barney Frank, one of the authors of the 2010 Dodd-Frank Act, was actually a member of the Board of Directors of Signature Bank.

⁸Mimir, Y. and Sunel, E. (2023), “[Fear \(no more\) of Floating: How emerging market central banks avoided a currency meltdown during the pandemic despite purchasing local-currency assets](#)”, SUERF Policy Brief, n. 684.

⁹Cavallino, P., Cornelli, G. Hördahl, P. and Zakrajšek, E. (2022), “[“Front-loading” Monetary Tightening: Pros and Cons](#)”, BIS Bulletin n. 63. By the fall of 2022, more than 95% of central banks in the sample in this paper had started to increase their policy rates.