
CHAPTER 8

THE FLIGHT TO SAFETY

Safe Assets

Borrowing Costs in the Euro Area: 2010-12 crisis

The Pandemic Flight to Safety of 2020

**a crash course
on crises:**

macroeconomic

concepts for

run-ups,

collapses, and

recoveries

**markus k. brunnermeier
and ricardo reis**

FLIGHT OF CAPITAL TO SAFETY



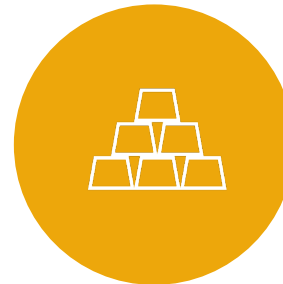
A paradoxical feature of financial crises: even as interest rates across many sectors and regions spike up, the interest rates in many other asset classes and regions become unusually low



This shift from a risk-on to a risk-off mode can amplify financial crises: these price changes reinforce the perception of relative risk across the assets



These price movements reflect a flight of capital to safety: as investors shift their portfolios away from assets deemed to be risky, towards those deemed to be safe, the price of the latter rises



Within countries, this shift naturally occurs from equities (riskier) to government bonds (safer). Across regions, this happens as capital flies from emerging markets (riskier) to advanced economies (safer)

SAFE ASSETS: A SIMPLE MODEL

SAFE ASSETS: A SIMPLE MODEL

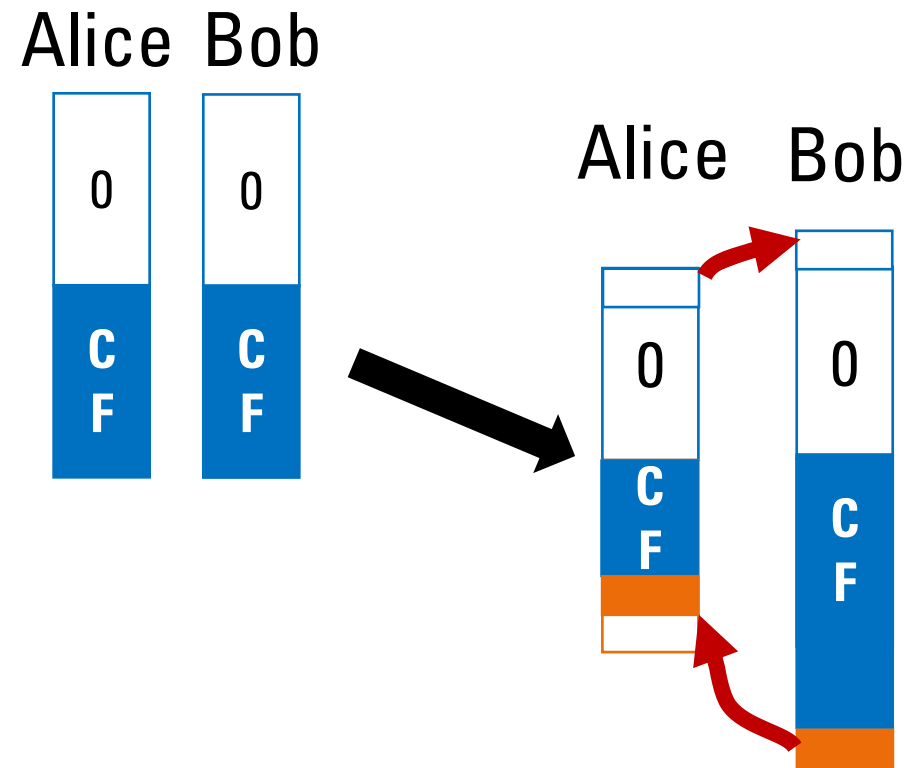
- Two people, Alice (A) and Bob (B): averse to risk, face some individual risk of unexpected expenses.
- Perfect negatively correlated risks: when one gets good news, the other gets bad news.
- Financial frictions: A and B cannot insure each other.
- Two assets they hold:
 - A productive risky asset: has a positive cash flow (the blue rectangle)
 - A safe asset: for simplicity zero cash flow

Alice Bob

0	0
C F	C F

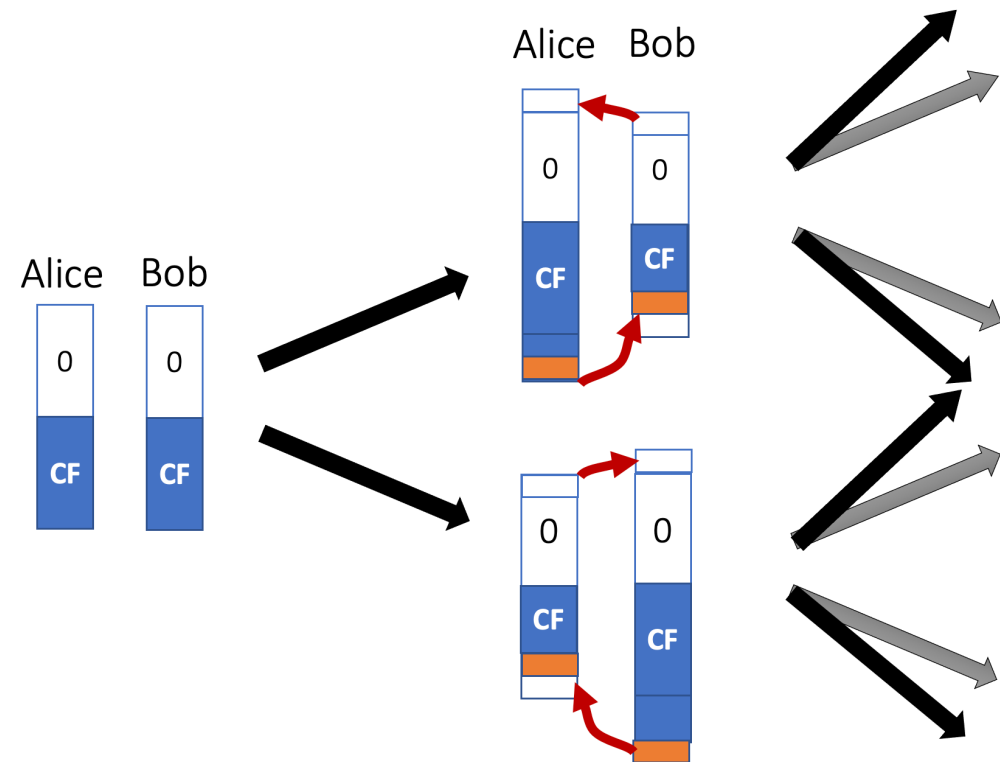
SAFE ASSETS: A SIMPLE MODEL

- Next period, a shocks comes.
- Alice faces a negative shock to her productive asset and Bob faces a positive shock (blue area shrinks/expands)
 - Alice can sell the 0-asset to Bob in return for a payment (orange area)
 - The person with a loss receives a positive cash flow asset in exchange for a zero cash flow asset
 - Safe asset is used to smooth out shock.



SAFE ASSETS: A SIMPLE MODEL

- Same would happen if roles were reserved
- Same happens when future shocks arrive
- Which assets can serve this role?



CHARACTERISTICS OF A SAFE ASSET

1. Indirect insurance

- Individuals can insure each other indirectly by holding a safe asset (zero cash-flow) and re-trading after the shocks are realised
- The safe asset may not give a cash flow, but it gives a service flow in the form of self-insurance via re-trading
- The safe asset might appreciate if both individuals suddenly face more risk. E.g., going into a recession
- The safe asset is a good friend to everyone in risky times, not only when a particular idiosyncratic risk materialises.

2. Easy tradability

- This is ideally achieved if the cash flow is the same across a wide variety of possible future scenarios
 - The holder does not need to investigate what is more or less likely to happen in the future
 - The holder does not need to worry that other traders know more about the cash flows than he/she does, letting them take advantage of him/her when trading.
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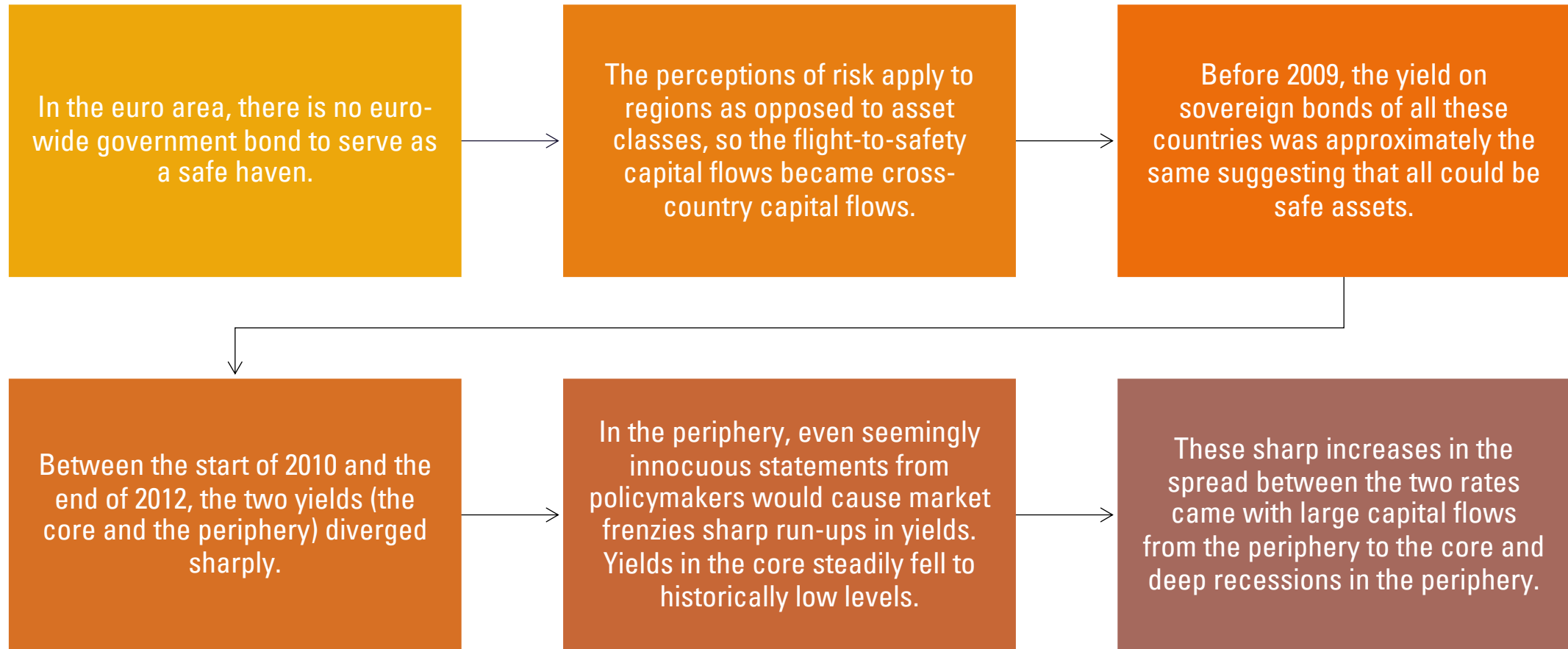
CHARACTERISTICS OF A SAFE ASSET

3. Self-fulfilling status

- An asset is safe if it is perceived by most to be safe.
 - In times of crisis, risk perceptions rise. Investors flee from risky assets and rush into safe assets, which reinforces their safety.
 - Within a country: government bonds as safe assets.
 - International finance: global reserve assets as safe assets.
 - In times of crisis, safe assets gain in value, makes it easier for governments to issue safe assets to finance stimulus measures, to stabilise their economies in recession.
 - Making the country's government bond more resilient against the macro shock. Self-fulfilling element.
 - A country's debt may lose its safe-asset status, if a debt restructuring is deemed likely.
 - Capital may flow to a foreign safe asset, further amplifies the stress a country's economy is under.
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BORROWING COSTS IN THE EURO AREA: THE 2012-12 CRISIS

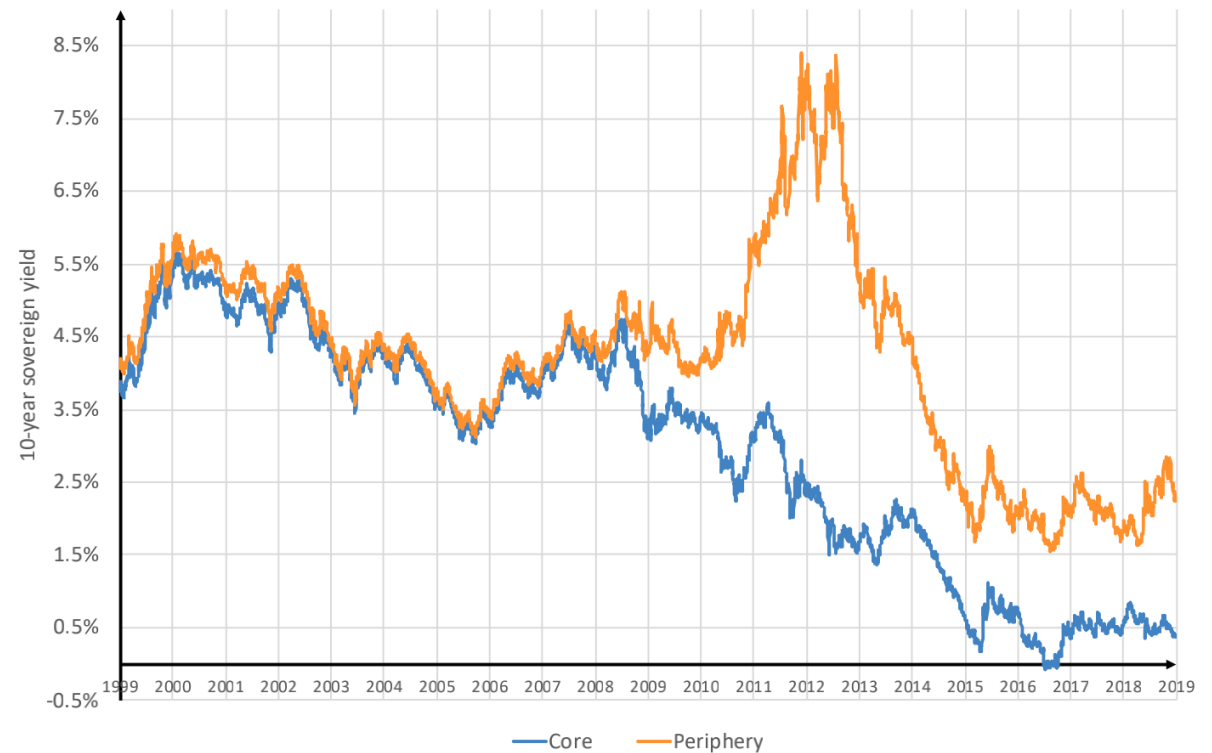
SEQUENCE OF EVENTS



10-YEAR SOVEREIGN YIELDS IN THE PERIPHERY AND CORE

The figure plots the sovereign yields between the 1999 and the end of 2018 for the euro area core countries (Germany and France) and periphery countries (Greece, Ireland, Italy, Portugal, Spain).

- Before the crisis, the yield on sovereign bonds of all the countries was approximately the same suggesting that all could be safe assets.
- Between the start of 2010 and the end of 2012, sharp increases in the spread between the two rates came with large capital flows from the periphery to the core and deep recessions in the periphery.



WHAT WERE THE SOURCES OF RISKS?

The exchange rate of the periphery currency can depreciate relative to the core

- When converted to the same units, the return of the core is lower than the stated interest rate.
- The use of euro had eliminated the perception of exchange rate risk.
- In 2010, 're-denomination risk' emerged. Debt in euros would be re-denominated into new national currencies worth less than the euro; effectively, at default.
- An example: financial contracts went from putting the probability that Greece leaves the euro at below 1% in 2007 to above 50% in 2010.

Possible loss of the safe asset status of the peripheral government bonds

- Government bonds from vulnerable euro countries became less desirable precautionary savings instruments.
- The peripheral government bonds' service flow, declined investors asked for higher cash flows in the form of high interest rates.
- Government debt issued by the core countries became more attractive as safe assets and hence their yield declined, leading to capital flows from the periphery to the core of the euro area.

Losing the safe asset status forces peripheral countries to pay a higher interest on their bonds

- This increases their interest burden, making their government debt level less sustainable, and a default more likely.
 - This increase in default risk increases the interest rate further.
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THE 2010-12 CRISIS: SOLUTIONS

The Maastricht Treaty

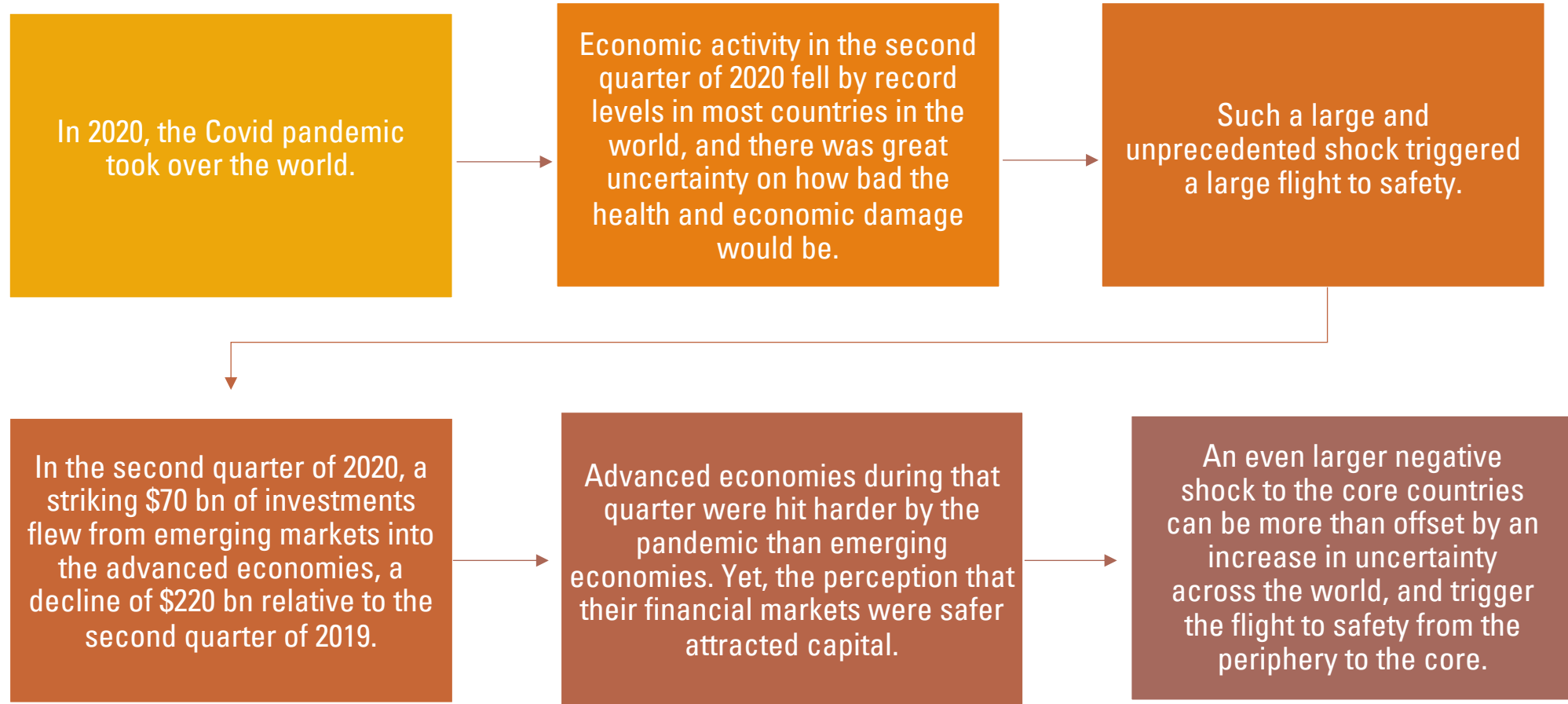
- Prevents European institutions from bailing out countries with debt problems.
- Reasons for making default risk explicit:
 - Eliminate inflation risk arising due to fiscal problems as ECB would not be forced ex post to debase the real value of the debt by inflation
 - Activate market discipline, have countries that fail to follow disciplinary budget rules face a higher interest rate
 - The increase in default risk for peripheral government bonds makes them information-sensitive: their payoffs are not kept constant across various circumstances. Well-informed investors can take advantage of uninformed ones. The latter withdraw from them and markets freeze.
 - A bad liquidity outcome can arise when governments have to roll over a large amount of debt

A common bond

- Attack the root of the problem: the asymmetry between the bonds and their underlying fiscal situations across different regions.
 - A common bond imposes a single equilibrium with no cross-region flights to safety.
 - Such a bond can be designed without one country having to guarantee for the other country's debt (SBBS).
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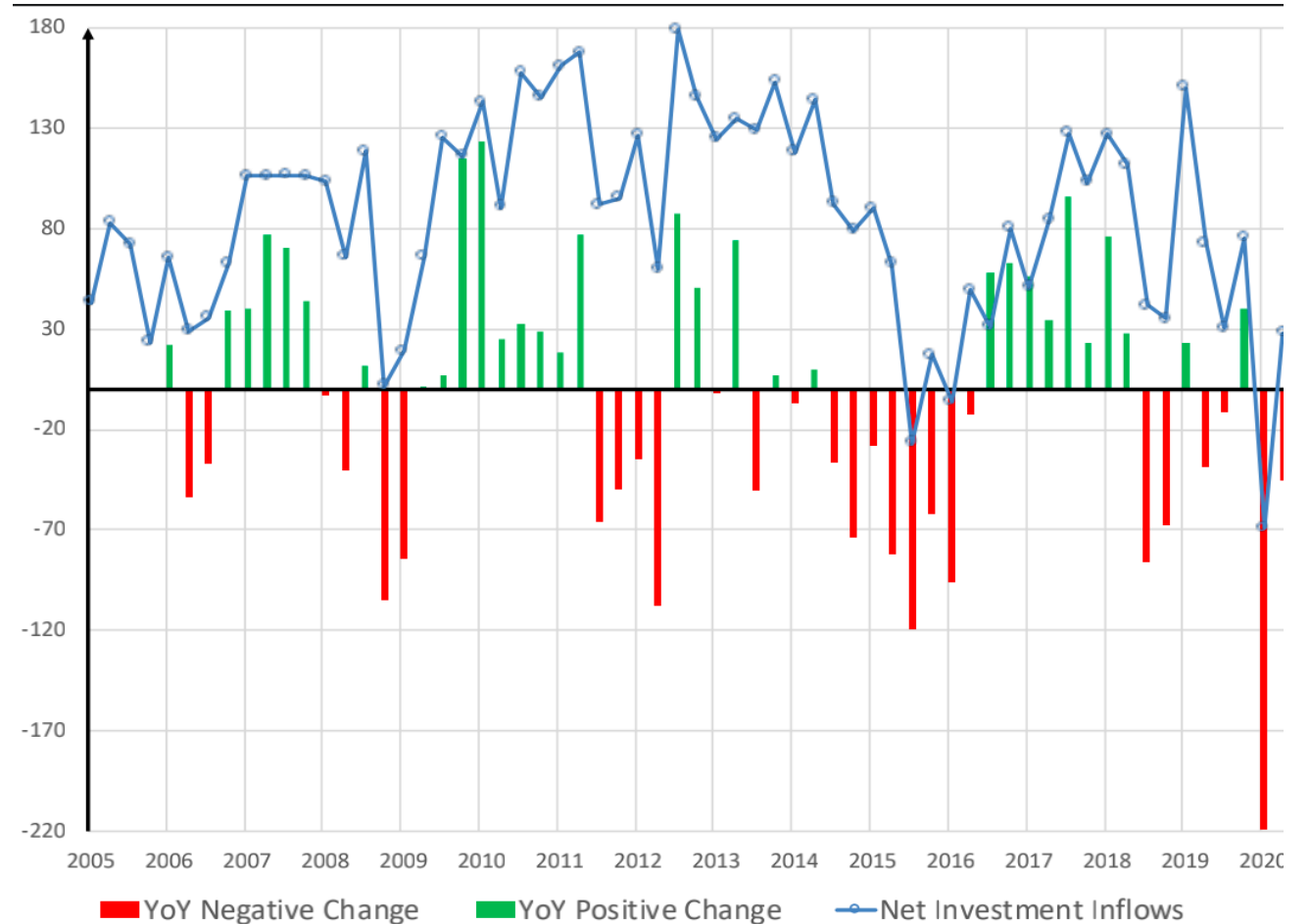
THE PANDEMIC FLIGHT TO SAFETY OF 2020

SEQUENCE OF EVENTS



THE PANDEMIC FLIGHT TO SAFETY OF 2020

- The figure shows the quarterly net capital flows going to 21 emerging economies (sum of direct investment or portfolio investments in the balance of payments.)
- Sometimes they rise (green bars), and sometimes they fall (red bars), but almost every single quarter between 2005 and 2019, these flows were positive, with a brief and small exception in 2015 ("taper tantrum").
- But look at the big red line in 2020: a pandemic flight to safety.



THE PANDEMIC FLIGHT TO SAFETY OF 2020

The Federal Reserve fiercely protected the safety of the U.S. Treasuries market, by buying the U.S. government bonds from those who wanted to sell them, lending against them for those who needed liquidity, and supporting dealers in the market where they are traded.

A combination of good policy and good luck reverted this shift in the second half of 2020.

Whilst the capital that left the emerging markets did not go straight back, the outflow stopped right away.

At least in 2020 and early 2021, a crisis in emerging markets was averted.



SUMMARY

- In a financial crisis, investors shift their portfolio away from assets they deem to be risky and towards those they deem to be safe. A **flight of capital to safety**.
- A **safe asset** is considered to give indirect insurance, has easy tradability and self-fulfilling status.
- Solutions of the 2010-12 crisis of borrowing costs in the euro area: The Maastricht Treaty and a common bond.
- The COVID pandemic triggered a large and unprecedented flight to safety. Even though advanced economies were hit harder by the emerging economies, the perception that their financial markets were safer attracted capital.
- An even larger negative shock to the core countries can be more than offset by an increase in uncertainty across the world and trigger the flight to safety from the periphery to the core.

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