

DANMARKS
NATIONALBANK

PANEL REMARKS, SIGNE KROGSTRUP

16TH ANNUAL NBP-SNB JOINT SEMINAR, ZURICH, 18 DECEMBER 2019

Signe Krogstrup, Head of Economics and Monetary Policy



DANMARKS
NATIONALBANK

Some conference highlights :

Key policy challenges for external adjustment and monetary policy

1

Understanding the impact of **demographics and pensions** on external adjustment, r^* , ELB and monetary policy.

2

Financial integration and the changing nature of **cross-border financial linkages and spillovers** – policy implications

3

Measurement of international financial integration – assessment of vulnerabilities

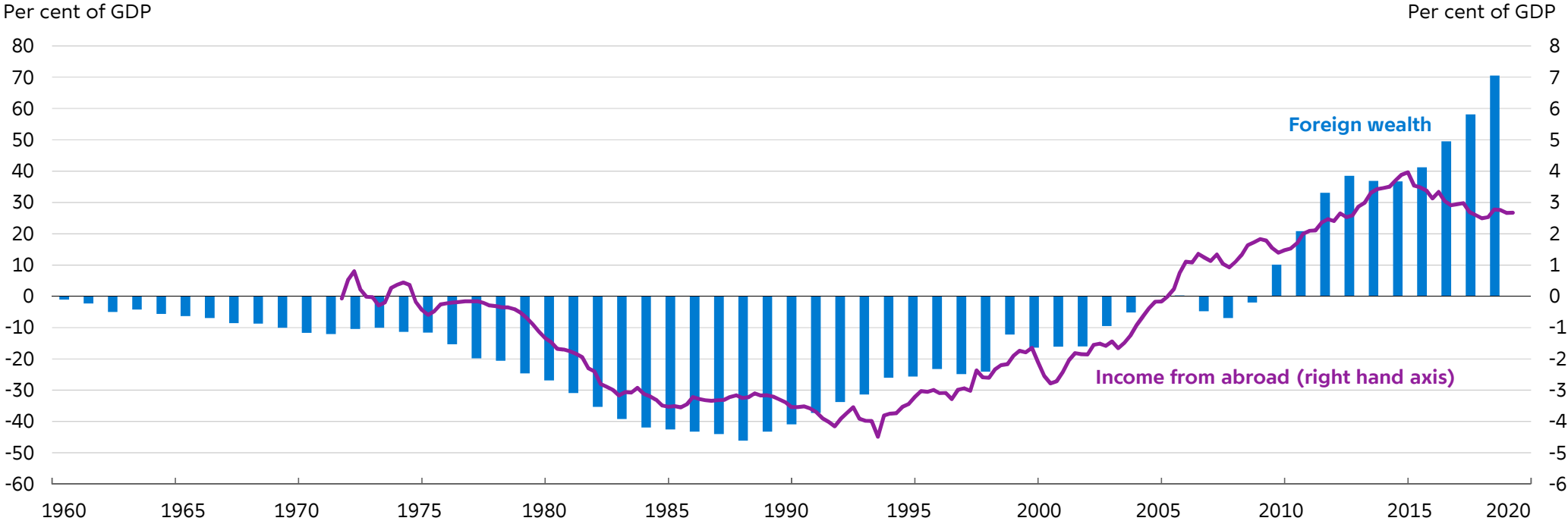
Research agenda: Retrenchment, changing capital flow sensitivity to global stress episodes

- **Investor base perspective.** Rise in saving in some countries, change in set of financial institutions playing a role in intermediating cross border funds, increasing role of non-bank institutional investors (Hashimoto Krogstrup 2019).
- **Domestic financial accounts linked to IIP** crucial (Hansen Krogstrup 2019 for Korea, Hashimoto Krogstrup cross countries for financial institutions).
- **Matters for transmission of shocks, spillovers,** vulnerabilities (Hansen Krogstrup 2019, Hashimoto Krogstrup, Goldberg Krogstrup 2019 – NFA plays a role in sign of pressures).
- **Risk management practises and foreign exposure** of institutions determine how they adjust balance sheets in response to global stress episodes (Krogstrup Tille 2018, Hashimoto Krogstrup 2019, Hansen Krogstrup 2019)
- **Key additional measurement challenge:** Off-balance sheet FX exposures key, huge, but rarely reported. Danish data?

1. Policy implications: Example from Denmark

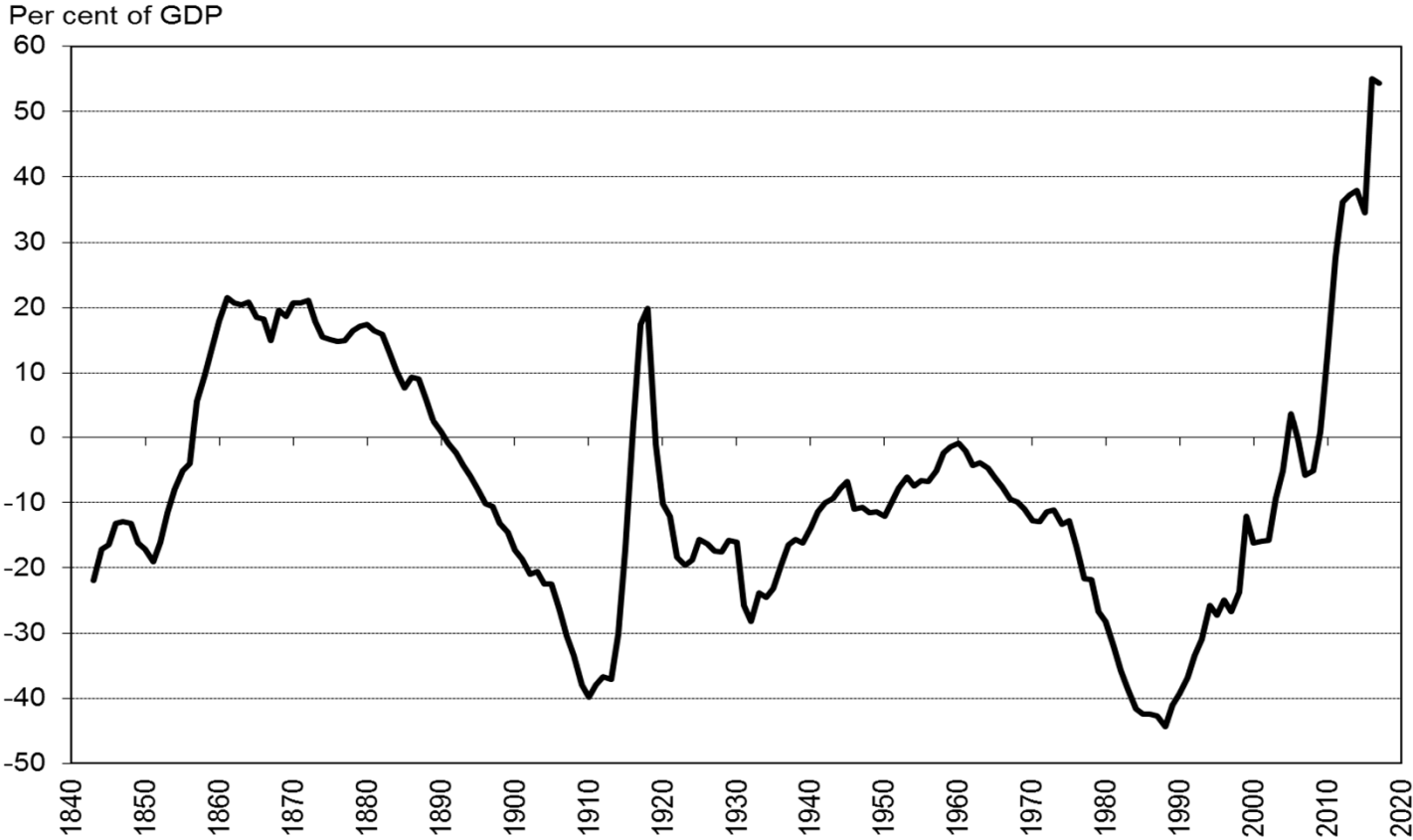
The rise in savings in Denmark, changing role of pension funds and institutional investors in exchange market pressures, role of FX hedging and measurement in the assessment

Denmark has become a net creditor nation: Fiscal rectitude, demographics, tax incentives to save for pensions



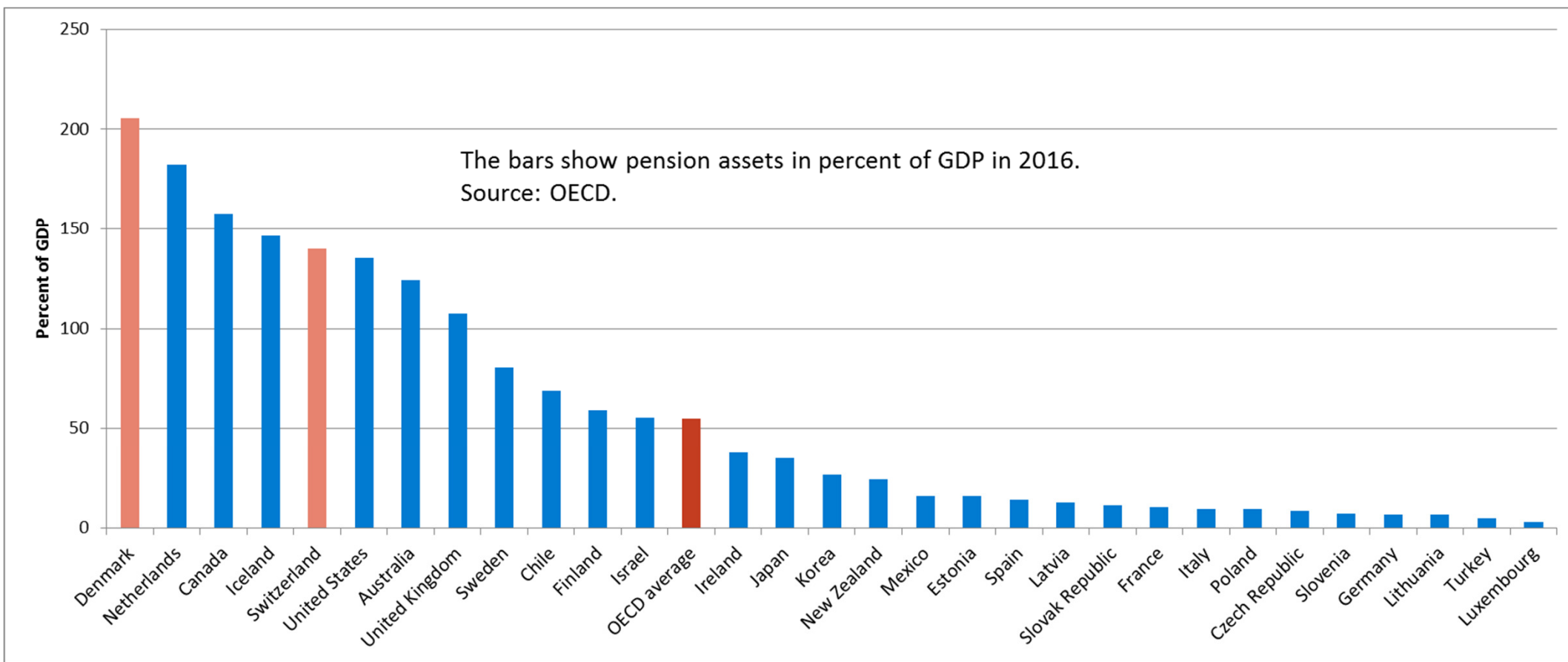
Note: Last observation for foreign wealth is 2nd quarter 2019.
Source: Statistics Denmark.

Unprecedented in history: International investment position 1840-2017



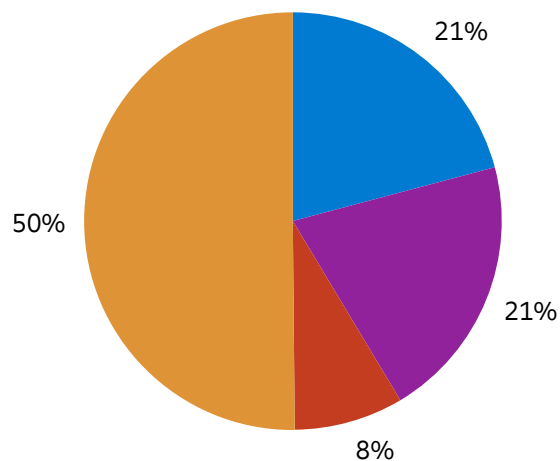
Source: Abildgren (2017)

Pension assets have reached unprecedented levels



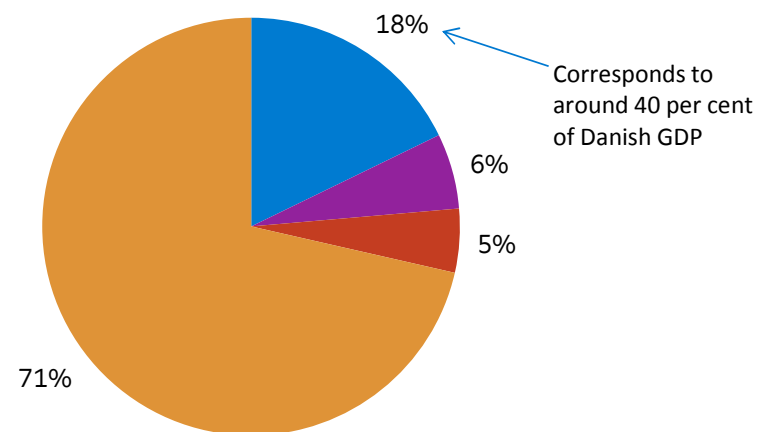
Danish pension funds invest large share of NFA. Role of hedging.

Pension assets by currency exposure, Q3 2019
Assets approx DKK 4800 bn (EUR 650 bn)



■ EUR ■ USD ■ Other ■ DKK

Pension asset exposure after FX hedging



■ EUR ■ USD ■ Other ■ DKK

FX market stress episodes in 2012 and 2015 in Denmark

- Exchange rate peg since 1982. Usually, fx outflows during stress events, positive interest rate spread to DM, euro.
- 2012: Shift to net creditor, and shift in patterns, inflow pressures at ZLB. Interventions, first move into NIR, and shift in sign of interest rate spread.
- 2015: Huge inflows following Swiss franc change in exchange rate policy. Inflows seen in interbank money markets.
- Closer inspection: Danish pension funds and other investors covering larger share of euro exposures using FX derivatives with domestic counterparty banks.
- Role of hedging in identifying source of pressures, data.

Denmark: New Dataset for Pension and Insurance Firms

New dataset – pension companies assets and liabilities

Monthly from 2015 – micro data, coverage of entire commercial pension sector balance sheets

Assets: Entire balance sheet

- Monthly security-level holdings, return and transaction by pension company
- Assets with ISINs merged with e.g. commercial data providers and securities statistics
- Some, but sparse, information, on non-listed assets

Liabilities: Provides a good description of company characteristics

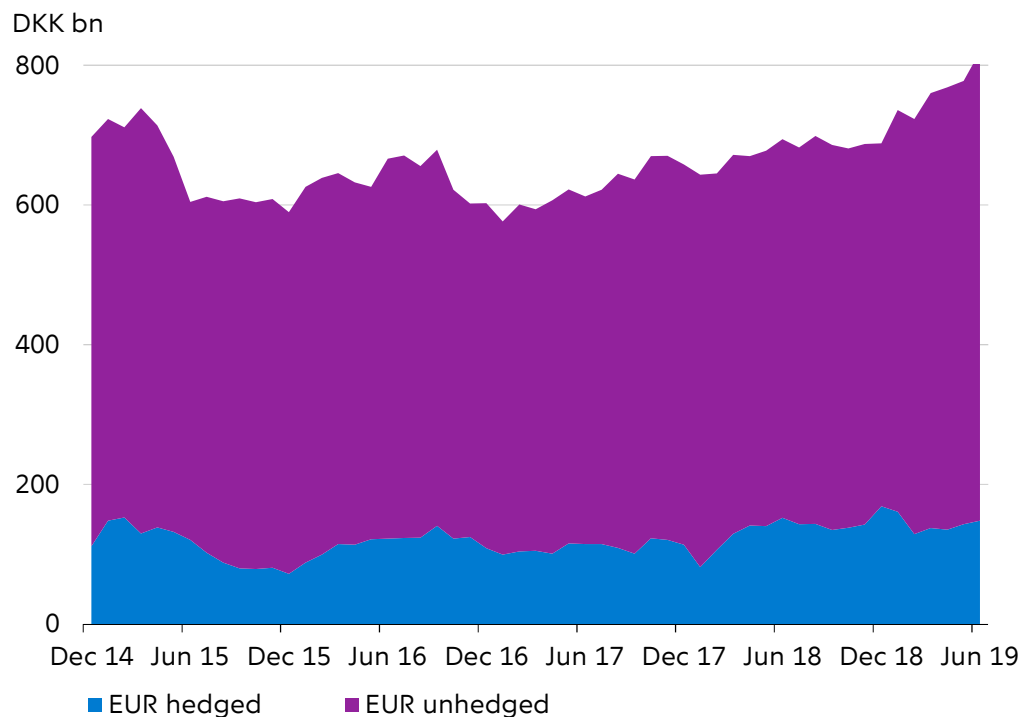
- Composition between average rate (~ guarantess) and market rate products by company
- Other characteristics of customer base

Derivatives: FX hedging portfolio by company

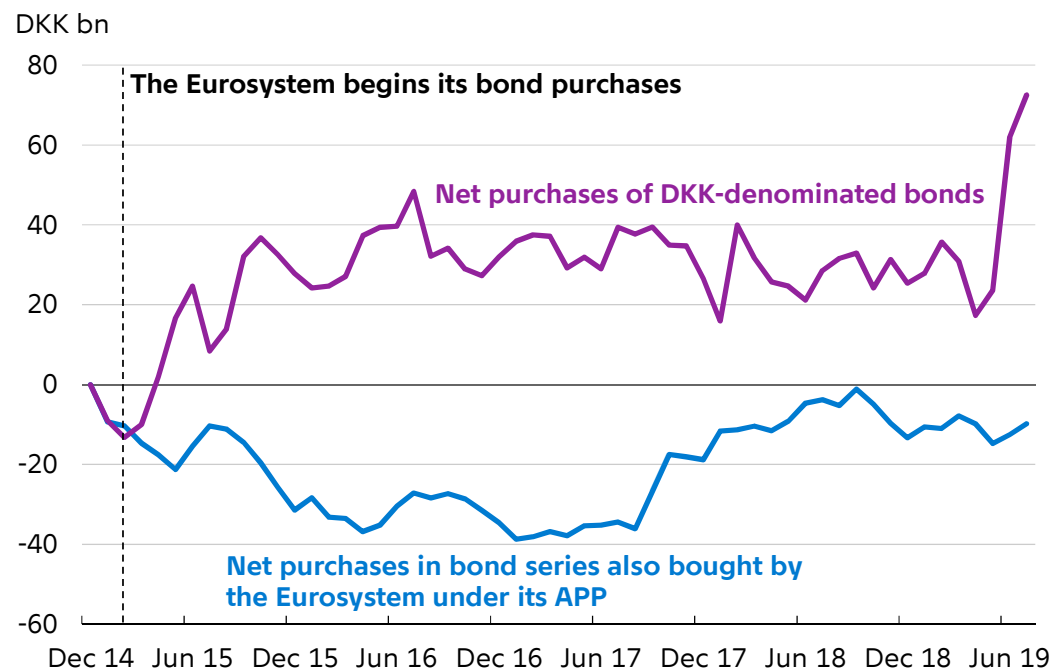
Official Danmarks Nationalbank data from 2018 (on an aggregate level)

Example: FX exposure and research on the effects of ECB's QE

Exposure to euro in asset holdings



Pattern of transactions following the introduction of the Eurosystem's asset purchase programme



Note: Based on large subset of Danish pension companies.

(Mis-)Measurement affecting the BoP

GDP revisions and assessing external imbalances economic activity, competitiveness

(Mis-)measurement issues affecting BoP

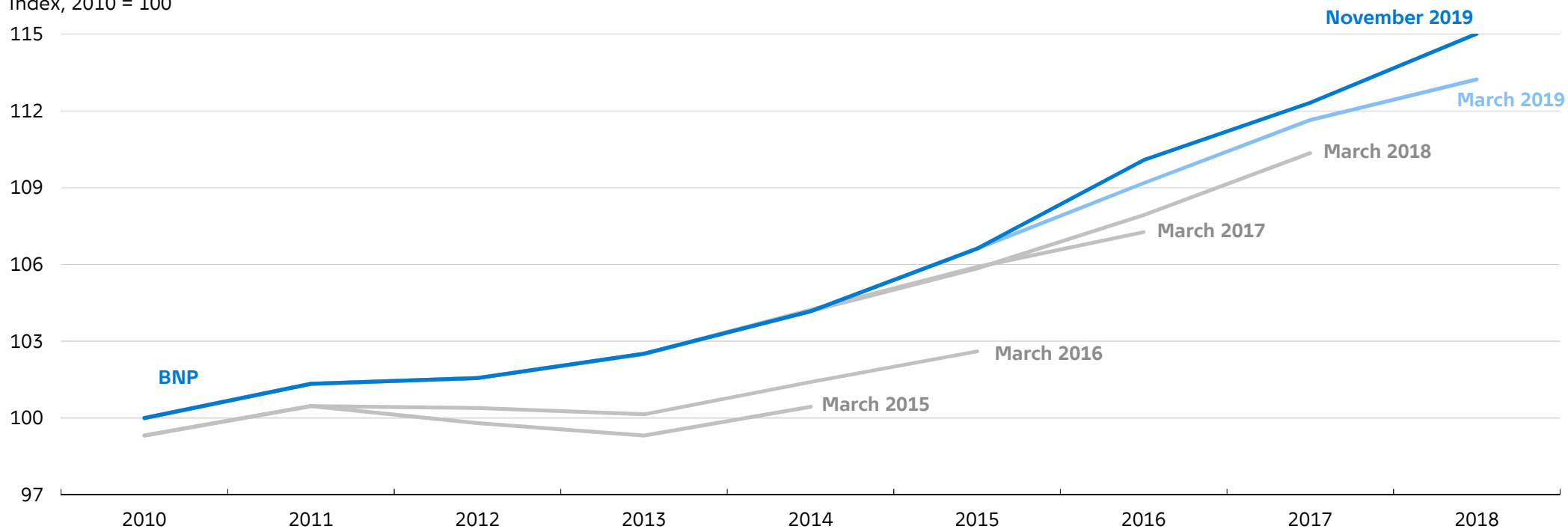
CA measures are meaningful for policy analysis if we can measure these correctly. Increasingly difficult.

- **Increasing globalization:** Cross border transactions increasingly complex. Residency and ownership of production processes and assets increasingly separated. Not clear that residency is always a meaningful standard.
- **Integration into GVCs** blurs line between imports, domestic production, exports, and the residency of ownership of production and profits.
- **Large gross foreign positions** exacerbates biases from misattribution of returns across countries: inflation bias, default risk and retained earnings (Adler, Garcia-Macia and Krogstrup 2019).
- **Hidden assets and income streams**, possibly due to tax evasion, illicit activities. FDI figures (Damgaard et al 2019).

Denmark: Revisions in merchanting and processing

- **GDP revisions increasingly challenge assessments of economic activity**

Index, 2010 = 100



Denmark: Revisions in merchating and processing

- **New DN study shows wage competitiveness measures can be inaccurate or misleading**

Index, 2000 = 100

