Growing imbalances of cross-border investment incomes: A 'Fault Line' in the Euro Zone?

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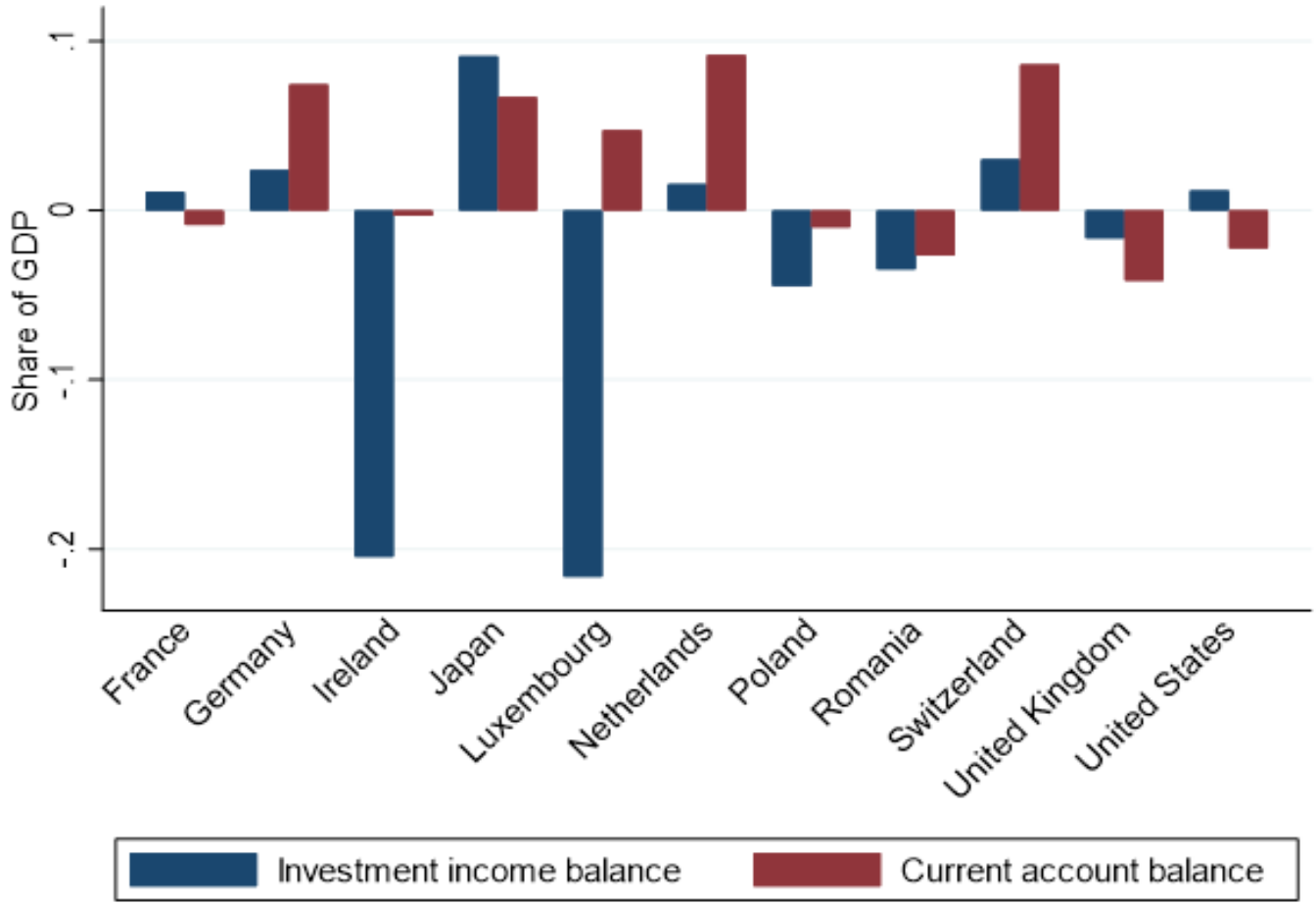
wiiw (online)

What are (cross-border) investment incomes?

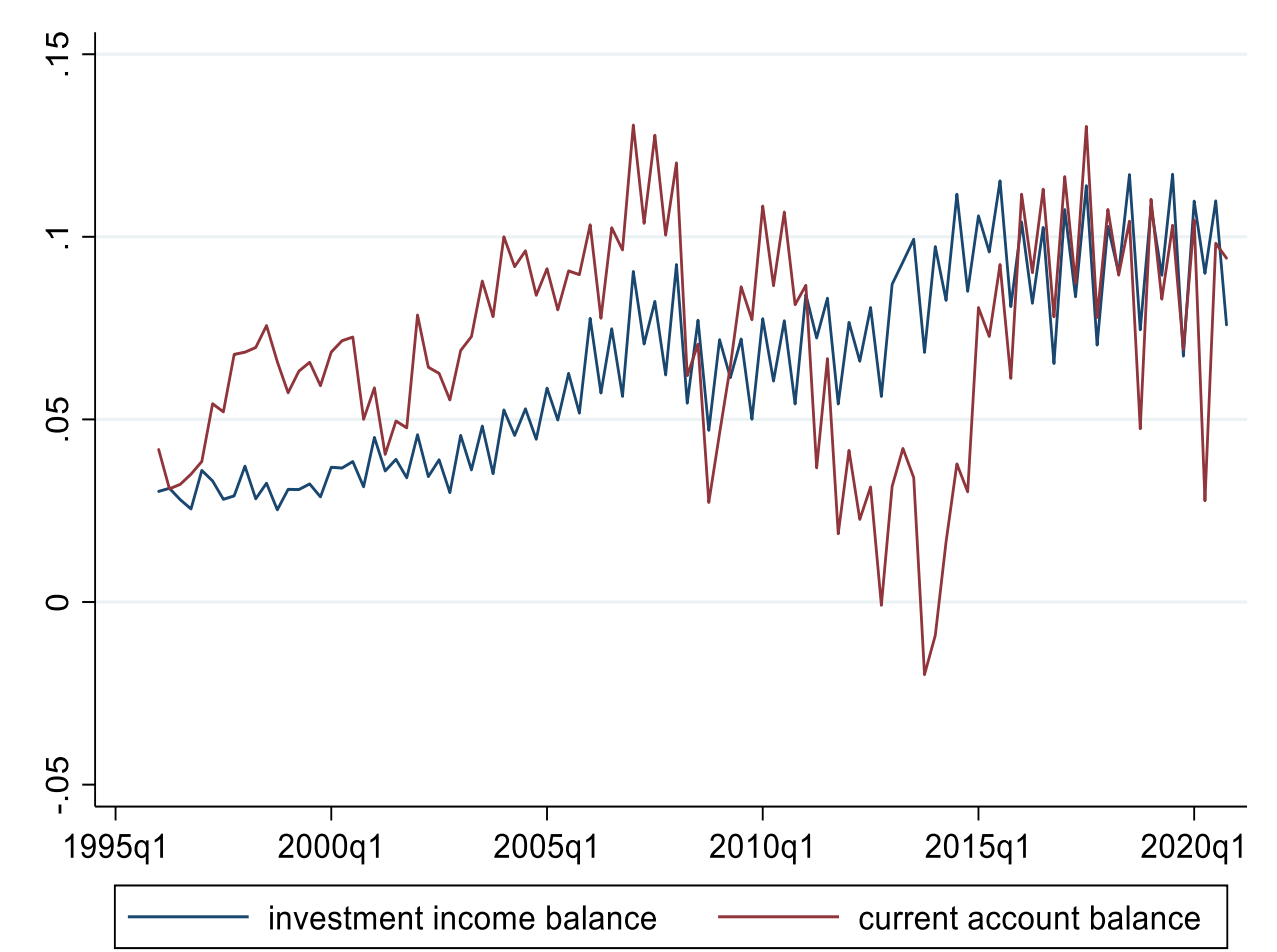
- Income payments on cross-border asset holdings (e.g., dividends, interests).
- They are part of the current account ('primary income payments')...
- ...and can hence contribute to imbalances.
  - $\Rightarrow$ Reflection of international wealth inequalities.
- Where do those asset holdings come from?
  - exporting (CA=FA)
  - exchange of financial assets ($\pm$FA)

Motivation: importance of investment incomes



Data source: own calculations based on data from Eurostat, FRED, Japanese MOF and Cabinet Office.
Data is averaged for quarters since 2012.

Motivation: the case of Japan



Data source: Japanese MOF and Cabinet Office.

Motivation: growing interest in investment incomes (1/2)

- *IMF* Article IVs for Japan and Colombia
- *Alberola et al. (2020 JIMF)*: stock imbalances persist since GFC, different behaviour of trade vs. income balance.
- *Bohn et al. (2021 JIE)* trace ownership of income in GVCs.
- *Joyce (2021 RIE)*: net investment income traditionally in deficit for EMEs (2-3% of GDP), driven by FDI, particularly for open economies.

Motivation: growing interest in investment incomes (2/2)

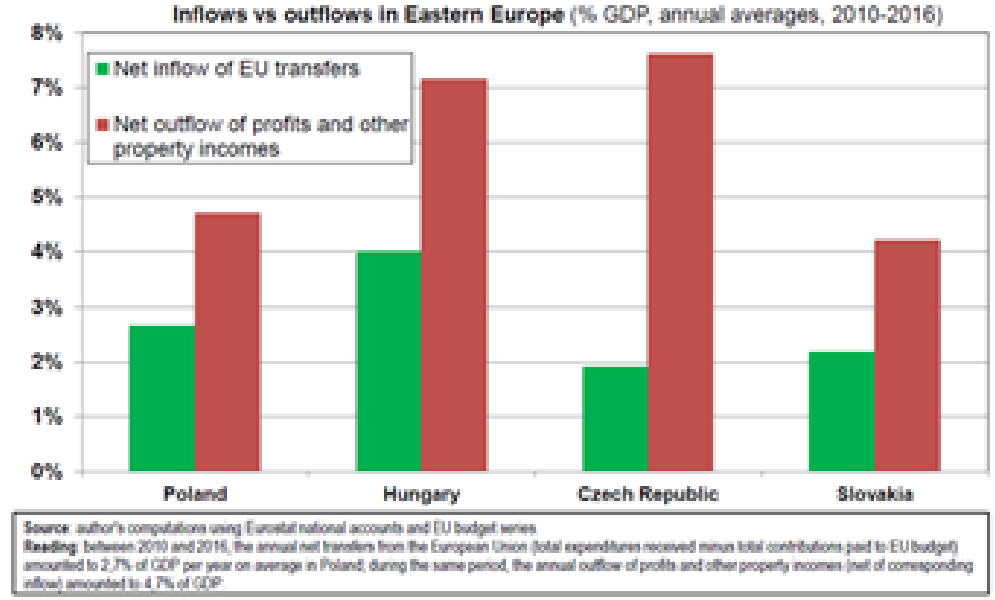
- *Limbergen (2020)*: patterns of investment income balance cannot be explained with traditional current account determinants for EU countries with aggressive tax planning.
- *Arkolakis et al. (2018 AER)*: welfare effects of openness can even be negative due to profit outflows.
- Policy debate on profit repatriation (especially in CEECs).

Motivation

Le blog de **Thomas Piketty**

16 JANVIER 2018 PAR **PIKETTY**

2018, the year of Europe



A PROPOS

Pour suivre Thomas Piketty, consultez sa page personnelle à l'Ecole d'économie de Paris, et abonnez-vous à son compte Twitter : Follow @PikettyLeMonde

Ce blog est celui d'un chercheur en sciences sociales, engagé dans la vie de la cité. L'auteur du Capital au 21e siècle et de Capital et idéologie porte un regard sans concession sur l'actualité sociopolitique française, européenne et internationale.

Tous les posts de blog en français

Hypothesis: A 'Fault Line' in the Eurozone?

- *Economic* because investment incomes are persistent and currency union lacks exchange rate for adjustment.
- *Political/distributional*: European division of labor in the context of GVCs could lead to systematic income outflows from periphery.
  - $\Rightarrow$ Thirlwal's BOP-constrained growth
  - $\Rightarrow$ Landesmann and Stöllinger (2019 SCED)

Contribution of this (soon to be) paper

- Highlights relevance of investment incomes for imbalances.
- Investigates dynamics and determinants of investment income flows, with particular focus on Euro zone:
  - Investment incomes are particularly persistent.
  - Investment income balance differs from other aspects of current account, particularly so in Euro zone.
  - But no particularly worrisome pattern in Euro zone.
- Considerable policy implications:
  - Monitoring of investment incomes (and associated stock positions) is important.
  - More disaggregated perspective on current account.
  - Data requirements.

Investment income data

- No global data source for investment income is available.
- Eurostat: quarterly CA & GDP data
- Federal Reserve Economic Data (FRED) of the St. Louis Fed
- Japan: Ministry of Finance (balance of payment) and the Cabinet Office (GDP)
- CA data n.s.a, GDP data s.a.

$\Rightarrow$ quarterly observations from $\sim$34 countries since $\sim$2008

Is investment income a particularly persistent current account component?

$$y_{it} = \theta y_{i,t-1} + \beta_{[it]\in j} t + \sum_{q=1}^{4} q_q + u_{it}, \tag{1}$$

where y is either inv.inc/GDP or CA/GDP and j indicates 'surplus' or 'deficit'.

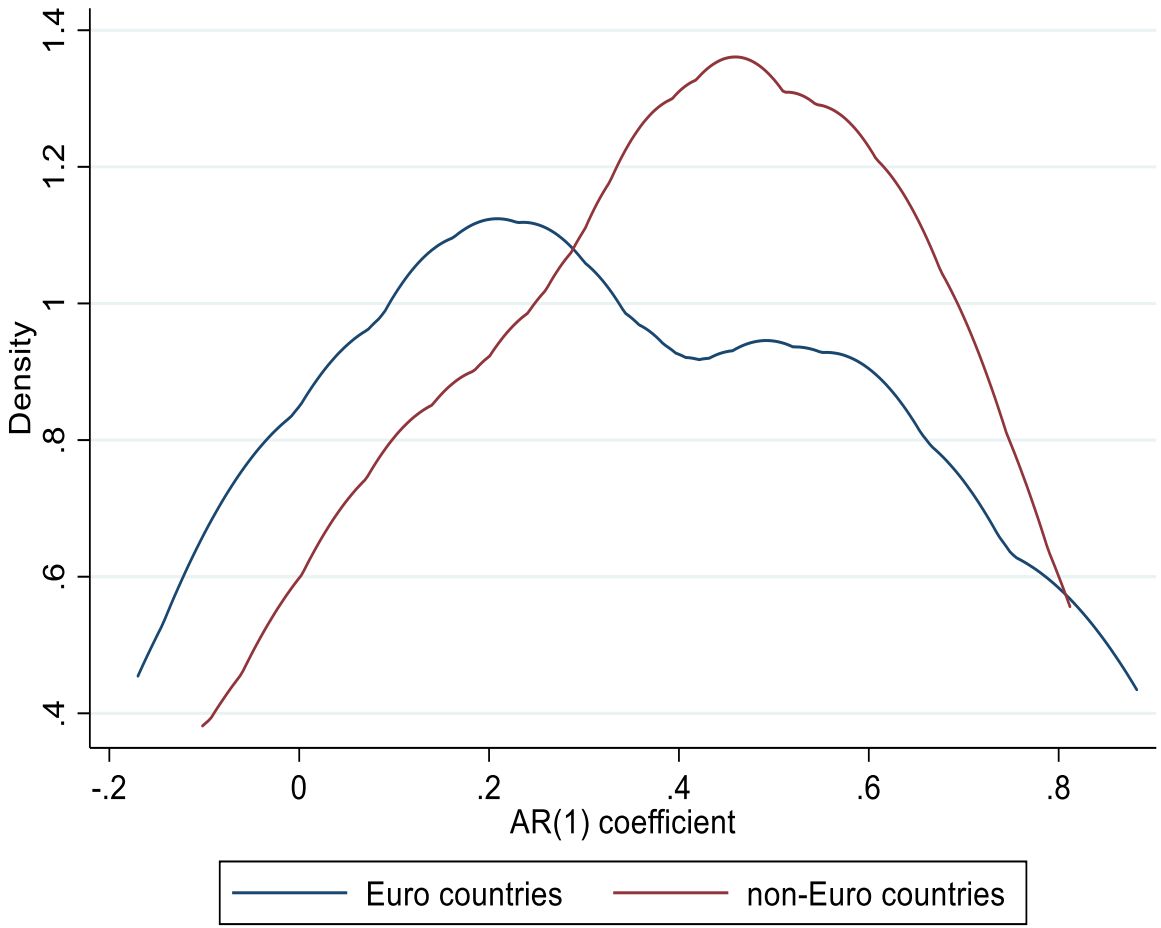
AR coefficient θ captures 'persistence'.

Regression results

VARIABLES	(1) invinc/GDP	(2) invinc/GDP	(3) CA/GDP	(4) CA/GDP
AR(1) coef	0.763***	0.365***	0.288***	0.186**
	(0.0626)	(0.0347)	(0.0970)	(0.0890)
trend	6.71e-06	2.53e-05	0.000284***	0.000385***
	(2.41e-05)	(4.91e-05)	(7.81e-05)	(8.29e-05)
diff in trend	-9.35e-05***	-0.000110*	-0.000110*	1.12e-05
if in deficit	(2.96e-05)	(5.78e-05)	(6.13e-05)	(6.76e-05)
Observations	2,536	2,536	2,536	2,536
R-squared	0.767	0.291	0.627	0.473
Quarter dummies	yes	yes	yes	yes
Country FEs	no	yes	no	yes
Number of country	34	34	34	34

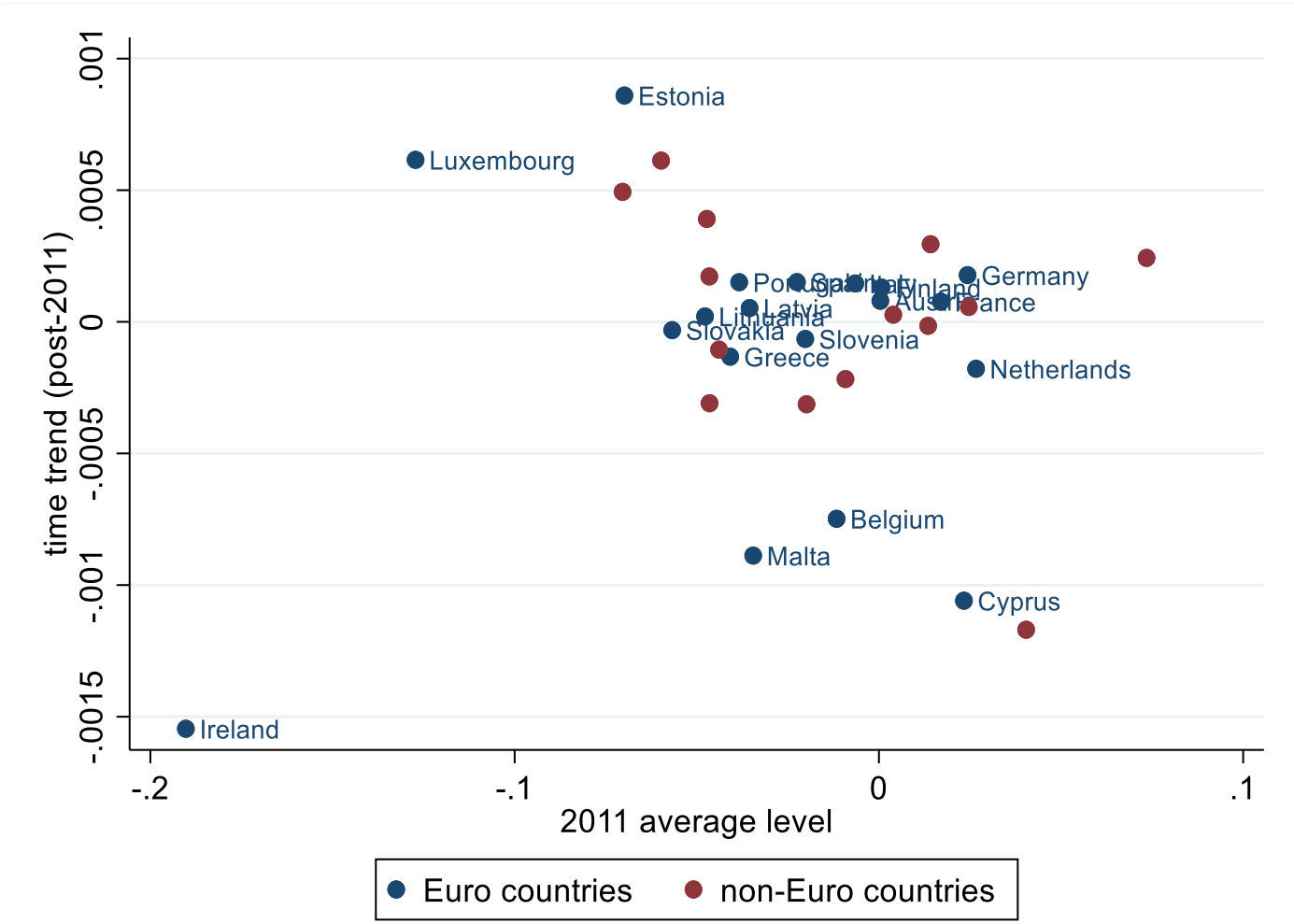
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Distribution of country-specific AR(1) parameters



Data source: own calculations based on data from Eurostat, FRED, Japanese MOF and Cabinet Office.

Convergence or divergence?



Data source: own calculations based on data from Eurostat, FRED, Japanese MOF and Cabinet Office.

Correlation between investment income and CA

Empirical regularity that trade balance and investment income balance are negatively correlated across and within countries (Alberola et al., 2020; Colacelli et al., 2021).

Intuition:

- 'Working age' population saves through exporting (positive trade balance)...
- ...accumulates assets abroad (CA=FA!) ...
- ...and, once aged, consumes through imports (negative trade balance), paying with revenues from foreign assets (positive investment income balance).
  $\Rightarrow$ see Japan (and Germany?)

Correlation between investment income and CA

Correlation between investment income and residual CA balances

VARIABLES	(1) non_invinc_ca_gdp	(2) non_invinc_ca_gdp
invinc_gdp	-0.155	0.0629
	(0.163)	(0.219)
dum_euro × invinc_gdp	-0.292*	-1.042***
	(0.172)	(0.254)
dum_euro	0.0437***	
	(0.00732)	
Constant	-0.0109**	0.00230
	(0.00411)	(0.00637)
Observations	2,571	2,571
R-squared	0.093	0.616
Number of country	34	34
Estimation	FE	BE

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Investment income and CA

- Negative correlation seems to be driven by Euro area.
- Maybe because flexible exchange rate works against old-age consumption cum investment income...

  ...but scope for further research.
- Negative/zero correlation raises question: why look at overall current account?
- Example: determinants of current account (Chinn and Prasad, JIE 2003; Lane and Milesi-Ferretti, 2012 JIE)

Determinants of the CAB and sub-accounts

VARIABLES	CA/GDP	invinc/GDP	non-inv.inc CA/GDP
youthdependency	0.00198**	0.000415	0.00157**
	(0.000957)	(0.000857)	(0.000728)
olddependency	0.00540***	0.00375***	0.00166***
	(0.000438)	(0.000395)	(0.000460)
termsoftrade (+?)	-2.78e-05	-0.000521**	0.000494**
	(0.000224)	(0.000234)	(0.000216)
M3/GDP (+)	-2.27e-05	-8.02e-05***	5.75e-05***
	(2.16e-05)	(2.97e-05)	(1.95e-05)
REER	0.000680***	0.000386*	0.000294
	(0.000215)	(0.000219)	(0.000245)
dum_euro	-0.00764**	-0.0117***	0.00408
	(0.00369)	(0.00323)	(0.00335)
domcredit	0.000212***	0.000314***	-0.000102**
	(4.52e-05)	(3.70e-05)	(4.25e-05)
savings	0.00472***	-0.00170***	0.00642***
	(0.000481)	(0.000481)	(0.000375)
aging (+?)	0.00285***	0.000974**	0.00188***
	(0.000530)	(0.000479)	(0.000458)
ggbudget (+)	0.00146**	0.00277***	-0.00131**
	(0.000680)	(0.000601)	(0.000638)
Observations	411	411	411

Determinants of the CAB and sub-accounts (FE)

VARIABLES	CA/GDP	invinc/GDP	non-invinc CA/GDP
youthdependency	0.00244	-0.000341	0.00278
	(0.00472)	(0.00132)	(0.00421)
olddependency	0.00478**	-7.03e-05	0.00485**
	(0.00180)	(0.000860)	(0.00180)
termsoftrade	0.000843	-0.000142	0.000985**
	(0.000526)	(0.000324)	(0.000432)
M3/GDP	0.000111	0.000444***	-0.000333***
	(6.76e-05)	(3.42e-05)	(6.26e-05)
REER	0.000306	9.74e-06	0.000296
	(0.000419)	(0.000295)	(0.000434)
dum_euro	0.0126	0.000364	0.0122
	(0.0179)	(0.00855)	(0.0138)
domcredit	-0.000185	-0.000301***	0.000116
	(0.000206)	(9.52e-05)	(0.000195)
savings	0.00381*	-0.00283***	0.00664***
	(0.00198)	(0.000930)	(0.00169)
aging	0.00331**	-0.00114**	0.00445***
	(0.00129)	(0.000536)	(0.00125)
ggbudget (+)	-0.00117	0.000496	-0.00167
	(0.00178)	(0.000655)	(0.00135)
Observations	411	411	411

The role of GVCs and TiVA

- *EXGR_DVASH*: Domestic value added share of gross exports
  $\rightarrow$ (inverse) measure of GVC participation
- *EXGR_SERV_DVASH*: Domestic services value added share of gross exports
  $\rightarrow$ functional specialization in service activities
  $\rightarrow$ proxy for MNCs' intangible assets (?)
- *DEXFVApSH*: Foreign value added share of gross exports
  $\rightarrow$ backward participation in GVCs
- *FEXDVApSH*: Domestic value added in foreign exports as a share of gross exports
  $\rightarrow$ forward participation in GVCs

The role of overall TiVA

Regression results

VARIABLES	(1) inv.inc/GDP	(2) inv.inc/GDP	(3) non-inv.inc CA/GDP
dum_euro	-0.0137***	-0.00721*	0.00209
	(0.00435)	(0.00424)	(0.00443)
EXGR_DVASH		0.00150***	-0.000688***
		(0.000244)	(0.000255)
Constant	-0.179***	-0.264***	-0.218***
	(0.0559)	(0.0545)	(0.0570)
Observations	312	312	312
R-squared	0.595	0.640	0.738
Other variables	9	9	9

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The role of service TiVA

VARIABLES	(1) inv.inc/GDP	(2) inv.inc/GDP	(3) inv.inc/GDP
dum_euro	-0.0135***	-0.00259	-0.00497
	(0.00380)	(0.00404)	(0.00394)
EXGR_SERV_DVASH	0.000919***	-0.00122**	
	(0.000302)	(0.000478)	
EXGR_DVASH		0.00231***	
		(0.000390)	
EXGR_SERV_DVASH_VALU			-0.00246***
			(0.000440)
Constant	-0.190***	-0.302***	-0.224***
	(0.0513)	(0.0548)	(0.0513)
Observations	284	284	284
R-squared	0.603	0.658	0.649
Other variables	9	9	9

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Forward and backward participation in GVCs

VARIABLES	(1) inv.inc/GDP	(2) inv.inc/GDP	(3) inv.inc/GDP
dum_euro	-0.164***	-0.128***	-0.164***
	(0.0356)	(0.0384)	(0.0355)
DEXFVApSH	-0.000607**	-0.00159*	0.198
	(0.000254)	(0.000916)	(0.569)
FEXDVApSH	0.00283***	-0.00233	0.00282***
	(0.000711)	(0.00249)	(0.000713)
EXGR_DVASH			0.198
			(0.569)
dum_euro × DEXFVApSH	0.00117**	0.00137***	0.00117**
	(0.000491)	(0.000386)	(0.000495)
dum_euro × FEXDVApSH	0.00695***	0.00450**	0.00693***
	(0.00134)	(0.00177)	(0.00134)
Constant	-0.238***	0.0338	-20.06
	(0.0585)	(0.104)	(56.87)
Observations	284	284	284
R-squared	0.732	0.437	0.732
Other variables	9	9 + FE	9

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Conclusion & policy discussion

- Investment income balance is important.
- No particularly worrisome patterns in Eurozone
  - Persistence is not higher (but: special period since 2011!)
  - No indication that participation in Euro(pean) value chains creates persistent income outflows / deficits.
- 'Fault lines' more likely to emerge along policy matters:
  - Aggressive tax planning $\rightarrow$ role of service TiVA?
  - Different composition of asset classes may create diverging policy interests (German asset transformation vs. 'the South').

Conclusion & policy discussion

- How meaningful is the current account as an aggregate (in a currency union)?

$\Rightarrow$ Shift attention to more disaggregate perspective!

$\Rightarrow$ More data and surveillance needed:
  - disaggregated perspective in Commission imbalance scoreboard
  - centralized bilateral data
  - analysis by individual central banks
    (e.g. using decompositions from literature/IMF)