

Who really invests in CEE?

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Outline

- ▶ Background
- ▶ Theory and empirics
- ▶ Data
- ▶ Statistical and econometric analysis
- ▶ Conclusion

Background

- ▶ Changes in the world economy in the last 2-3 decades: increased use of third (fourth etc.) countries by MNCs in their foreign direct investments, creation of „**chains of FDI**” or **FDI networks**
- ▶ Increased use of intermediary countries – **Why?** The **purposes** of MNCs can be different:(Kalotay, 2012):
 - Tax optimisation or tax avoidance, through using tax havens or quasi tax havens,
 - Establishment of regional headquarters or regional hubs,
 - Structural reorganisation of the MNC network with efficiency, tax or legal purposes (2016; GE),
 - Concealing the real origin of the MNC (mainly emerging, BRICS)
 - Round-tripping and transshipment issues in newly liberalised, politically instable states (e.g. Chinese or Russian FDI)
- ▶ **It is less and less clear who really invests in a country.**

	Name of the company	Immediate owner	Final owner	Sales (million HUF)
1	MOL Magyar Olaj- és Gázipari Nyrt.	Dispersed (stock exchange), majority foreign; largest: Hungarian and Czech	dispersed	3553005
2	Audi Hungária Motor Kft.	Hungarian (until end-2016)	German	2349346
3	Bosch-csoport	German	German	1184565
4	Mercedes-Benz Manufacturing Kft.	German	German	1058340
5	Magyar Villamosművek Zrt.	German	German	1058340
6	GE Infrastructure Holding Kft.	Swiss	US	895508
7	Magyar Suzuki Zrt.	Japanese	Japanese	710252
8	Tesco Global	Luxemburg, UK	UK	636234
9	Magyar Telekom	Dispersed (stock exchange), largest: German	German	602651
10	Flextronics	Austrian, Hungarian	Singapore/US	590464

Owners of top Hungarian companies (sales)

Source: Figyelő TOP 200, 2017, balance sheets of companies

Why is it important who really invests in a country? Theory and empirics

- ▶ **Locational advantages** (OLI-framework): L-advantages are important in relation to home and host countries and third countries; plus in interaction with O and I advantages
- ▶ **(Real) home country impacts** (export, production structure, BOP, technology, knowledge, economic policy etc., e.g. Kokko, 2006)
- ▶ **Host country impacts** depend on the (real) home country's various characteristics (regulations, economic policies, business and HR culture etc., not many studies but empirical evidence for various countries, e.g. Wang, Clegg, Kafouros, 2009 for China; Hennart, Larimo, 1998 (cultural distance impact on ownership); Chen, 2011: impact on firm performance)
- ▶ **Impact on the intermediary country** – not analysed yet

Data

- ▶ Up till recently: BOP FDI data published on **immediate or direct investing country**
- ▶ **New databases:** BPM6 and BMD4 (IMF, OECD) – data on the **ultimate controlling investor's** country

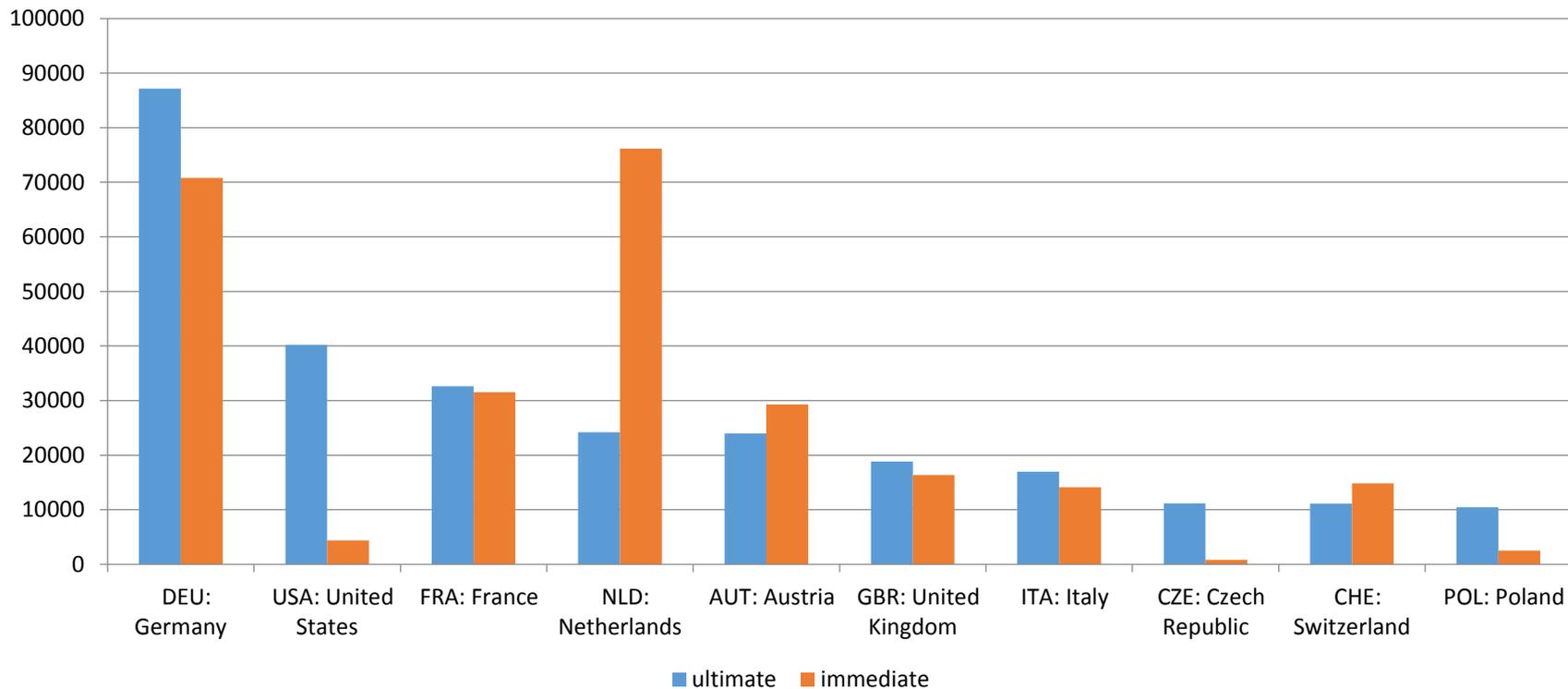
- ▶ **Problems** with the new databases:
 - Available for a few countries only from OECD (CEE: Czech Rep., Estonia, Hungary and Poland; OECD: USA, Switzerland, and Italy);
 - Certain countries' national banks publish preliminary data (Austria, France, Germany, UK)
 - Maximum 3 years covered (2014, 2015 and 2016)
 - For inward FDI only (no mirror comparison);
 - Controlling owner (with above **50 %** total ownership share) – some FDI is lost;
 - Problematic cases are assigned to the immediate investor.

But still: interesting insights into who really invests in your country-----

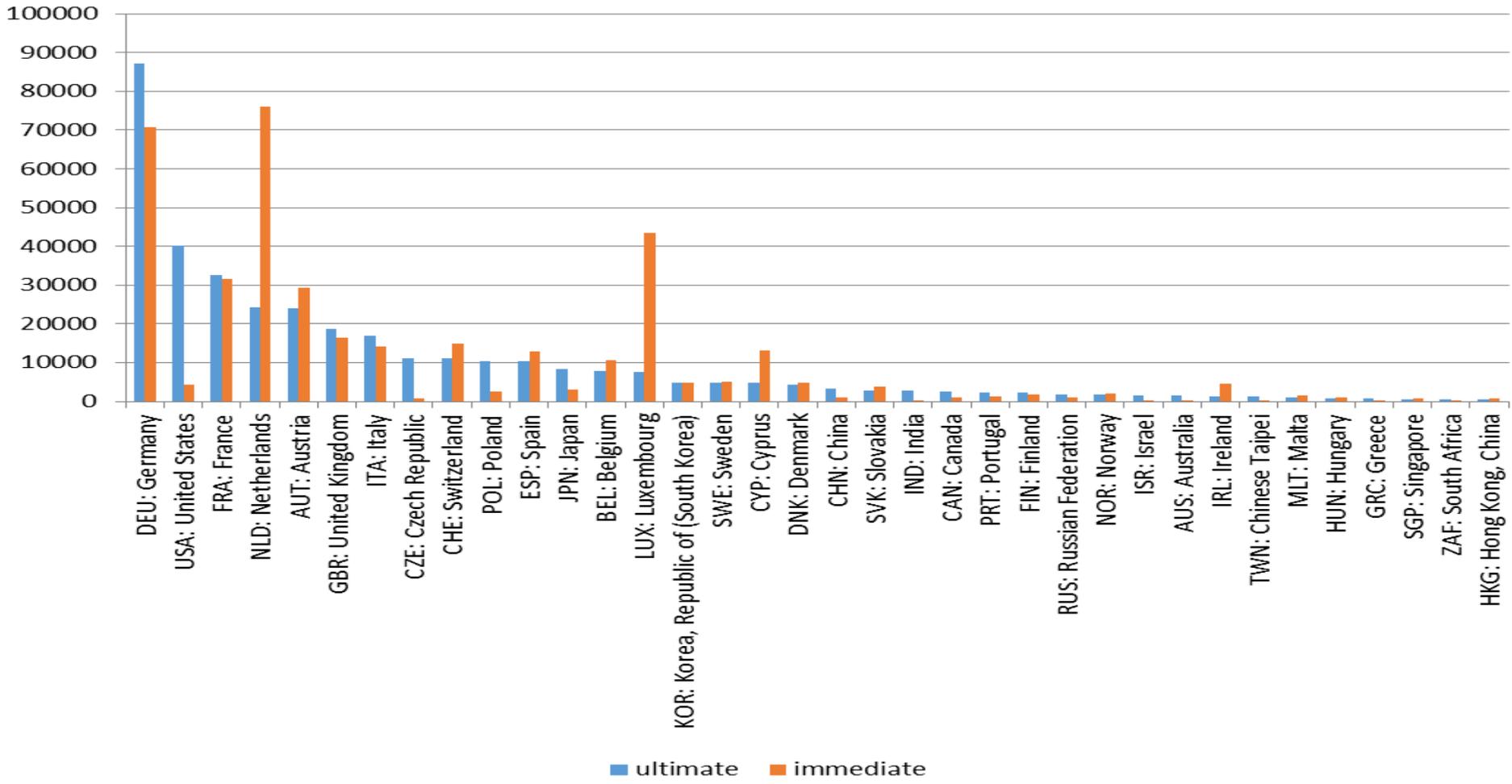
Key concepts

- ▶ **Indirect FDI:** Indirect FDI means the utilization of affiliates abroad as intermediaries for investment in third countries.
- ▶ **Roundtripping:** Capital channelled abroad by resident investors and returned to the domestic economy in the form of FDI.
- ▶ (**Transshipment:** inclusion of a third (or further) country between the home and host countries of FDI – basically equals indirect)
- ▶ Creation of ownership-chains – **double, triple or more counting of FDI** (as in foreign trade due to GVCs – TiVA, WIOD databases)

Who really invests in CEE: CZ, HU, PL, 2016 (million USD): Top 10 investors



Who really invests in CEE: CZ, HU, PL, 2016 (million USD)



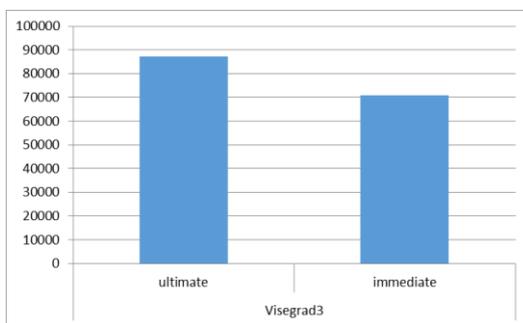
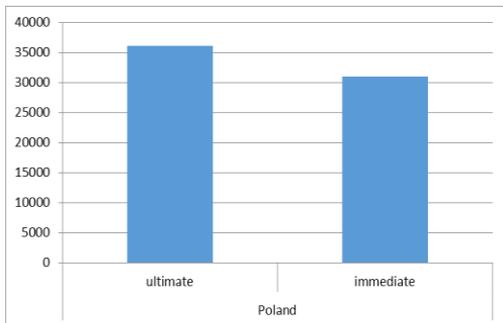
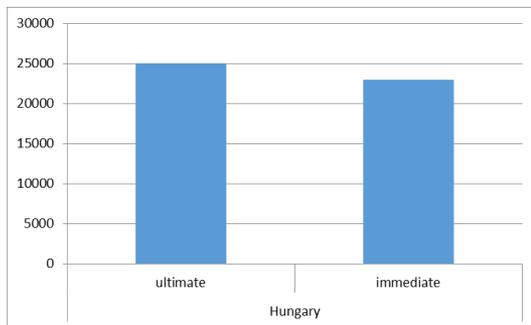
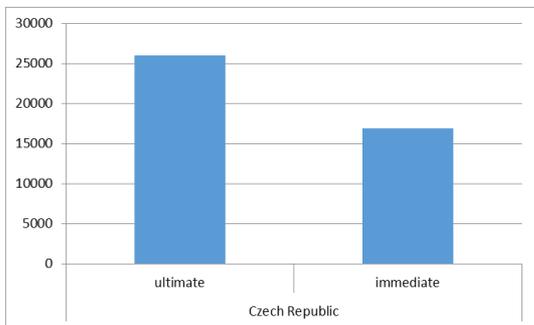
Who really invests in CEE?

- ▶ **Germany** is by far the most important, partly indirectly
- ▶ **US**: much more important, **mainly indirectly**
- ▶ **More even distribution (based on ultimate) for other EU-members (esp. France, Netherlands, Austria, UK, Italy, Switzerland, Spain)**
- ▶ **Higher share of extra-EU**: especially Japan, China, India, Chinese Taipei (Korea: no)
- ▶ **Higher share of CEE regional FDI** (except for **Hungary**: intermediary country), but main reason: **roundtripping**
- ▶ Minor, but higher share than immediate: Canada, Russia, Australia

Who has not invested so much in CEE compared to what we thought previously?

- ▶ **Certain EU-members**, (not outside-EU offshore centers) especially:
 - **Netherlands** („Dutch sandwich”) (CZ, HU, PL)
 - **Luxemburg** (CZ, PL)
 - **Austria** (mainly HU)
 - **Ireland** („Irish double”) (HU, PL)
 - **Less important: Belgium, Cyprus** (Russian FDI, especially PL)

Country case: Germany



- ▶ Mainly directly, but 16 billion USD indirectly (18%), esp. CZ
- ▶ For example in Hungary: Audi („Hungarian”) or Siemens (through Austria)
- ▶ Motivation: mainly organisational

The case of Audi: turning Hungarian FDI statistics upside down

- ▶ In November 2011, the sole owner, Audi AG of Germany apported the shares of its Hungarian subsidiary, Audi Hungária Motor Kft. into Audi Hungária Services Zrt (a business services firm)
- ▶ Since January 2017: dissolution of the holding firm
- ▶ (also OFDI statistics affected: to cover VW during crisis losses, the Hungarian Audi subsidiary bought shares in a Belgian VW subsidiary for 3 billion euros in 2012)

FDI stock invested in the manufacturing of vehicles and its share in total FDI stock invested in Hungary and of FDI stock invested in the manufacturing industry
(Percentage)

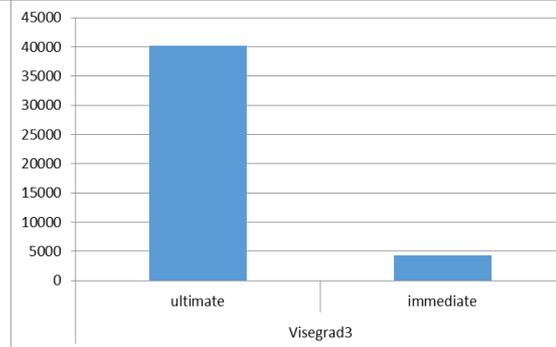
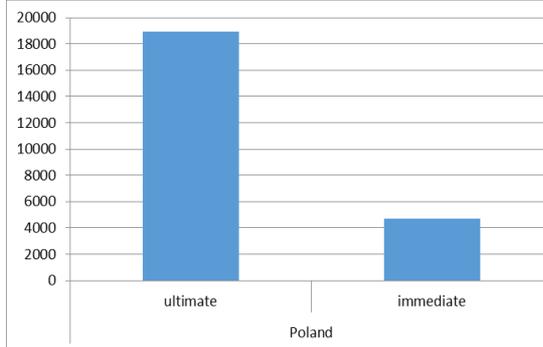
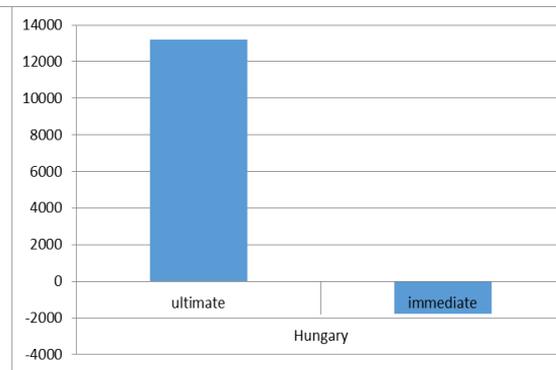
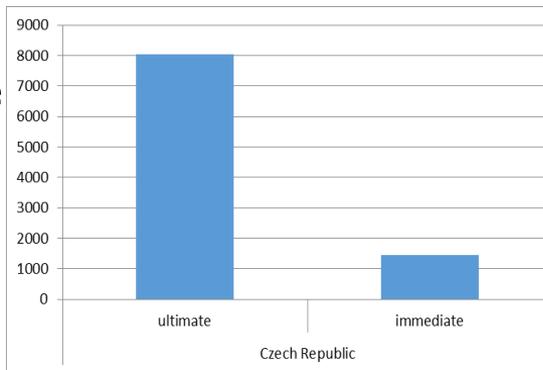
	2008	2009	2010	2011	2012
FDI into vehicle manufacturing (euro millions)	4,627.7	3,957.1	3,394.1	-1,693.2	2,517.8
Share of total FDI stock (%)	7.41	5.77	5.00	-2.59	3.24
Share of manufacturing industry FDI stock (%)	26.70	22.94	19.55	-17.13	15.91

NB: NACE 08 29-30.

Source: Authors' calculation based on HNB data.

Country case:USA

- ▶ Significantly more important than according to immediate data
- ▶ CZ: 4th, PL: 3rd, HU: 2nd investor country
- ▶ Mainly indirectly: ultimate is almost tenfold of immediate
- ▶ HU: only Budapest Bank was immediate
- ▶ Motivation: organisational (European hub) or tax savings (Ireland, Netherlands, Luxemburg)



Explains the negative value for HU:

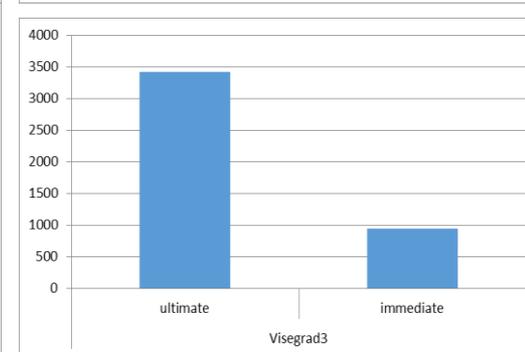
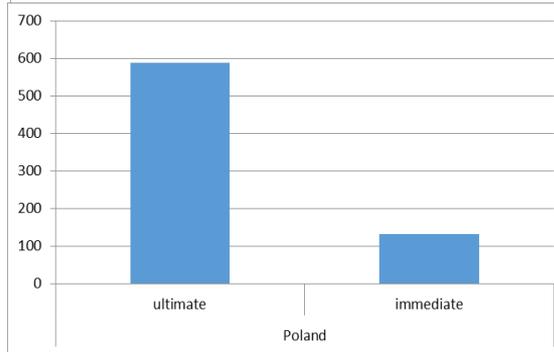
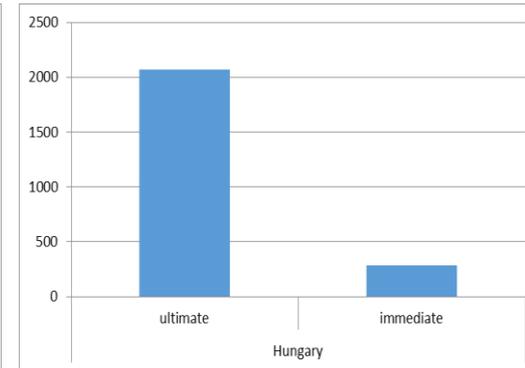
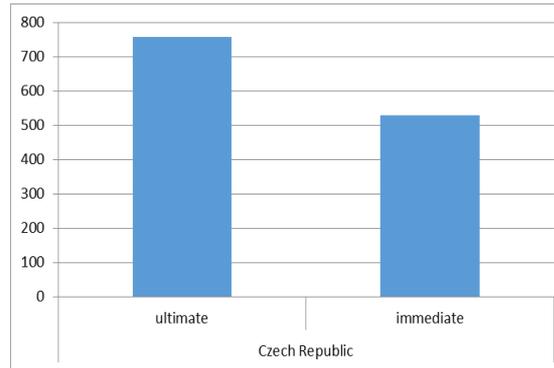
Top 16 US investments in Hungary in 2012

Rank	Company	Direct owner
1.	GE	Austrian, Dutch
2.	Budapest Bank	USA
3.	Flextronics	Austrian
4.	Jabil	Dutch
5.	Philip Morris	Swiss
6.	Lear	Luxembourg
7.	Alcoa-Köfém	Spanish
8.	Cargill	Dutch
9.	National Instruments	Austrian
10.	Delphi	Austrian
11.	GlencoreGrain	Swiss
12.	Unilever	British
13.	Coca-Cola	Dutch
14.	GM Opel	Spanish
15.	Coming Hungary	Luxembourg
16.	Kimberly-Clark	British

Source: Authors' compilation based on AMCHAM company listings, HVG TOP 500 and the balance sheet reports of companies concerned.

Country case: China

- ▶ Outside Europe usually more important than according to immediate data
- ▶ Certain FDI inherited through acquisitions of (Western) European parent companies (HU: Yanfeng, Borsodchem)
- ▶ High concentration, higher risks compared to others
- ▶ Motivation: tax optimisation (70% of Chinese OFDI goes directly to tax havens), concealing the real origin (Hong Kong relatively important), heritage



The case of Hungary: selected Chinese FDI projects

The Hungarian subsidiary	Parent company	Nationality of the ultimate investor	Nationality of the direct investor
Huawei Technologies Hungary	Huawei Technologies Investment Co. Limited and Skycom Tech. Co. Limited	Chinese	Dutch (100%)
Yanfeng	Shanghai Automotive Industry Corp.	Chinese	UK (100%)
ZTE Hungary	ZTE (Zhongxing)	Chinese	Dutch (100%)
Borsodchem	Wanhua	Chinese	Hungarian (100%), in-between: Luxemburg (96%), Cyprus (4%)
BYD Electric Bus and Truck Hungary	BYD (H.K.) Co., LIMITED	Chinese	Hong Kong (100%)

Roundtripping (when the ultimate owner is domestic)

- Present in all 3 countries, extent different:
 - Czechia: **8.5 % (!)** of total stock;
 - Poland: 4.5%
 - Hungary: 0.3%

(For comparison: for the „notorious” for roundtripping Russia: more than half of OFDI; in the US: 2%)

Indicative of the business environment and differential treatment of foreign and domestic actors?

„Real” share of EU FDI in CEE: much lower

	immediate EU stock in total (%)	ultimate EU stock in total (%)
Czechia	89.1	82.1
Hungary	87.7	57.6
Poland	92.2	68.5

- ▶ Immediate: dominating
- ▶ **Ultimate: much lower:** many outside-EU investors go through another EU country, when they invest in CEE
- ▶ **Especially low: Hungary** – lower „FDI-dependence” on EU, though the majority extra-EU FDI destined to produce for/serve EU markets

Level of intraregional (intra-CEE) FDI: overall slightly lower (CZ higher, HU lower)

	Immediate				Ultimate			
	Czechia	Poland	Hungary	V2	Czechia	Poland	Hungary	V2
Czechia	0	552.0	123.5	675.5	0	769.6	341.2	1110.8
Poland	2119.2	0	255.9	2375.1	1836.9	0	267.4	2104.3
Hungary	293.1	448.9	0	742.0	280.8	155.1	0	435.9

Econometric analysis (work in progress, preliminary)

- ▶ A simple test (whether the ultimate controlling owner data perform better than the immediate) - Hungary
- ▶ $\text{LnFDIstock}(2016) = \text{GDP}_{\text{home}} + \text{GDPpercapita}_{\text{home}} + \text{DIST}_{\text{capitals}} + \text{Dummy1}(\text{common border}) + \text{Dummy2}(\text{EU})$
- ▶ Results with immediate FDI: Rsquared: 0.387, adj. Rsquared: 0.327; F: 6.439, significant variables: per capita GDP and EU
- ▶ Results with ultimate FDI: Rsquared: 0.416, adj. Rsquared: 0.358; F: 7.258; significant variables: GDP, per capita GDP and EU

- ▶ Tax optimisation/evasion; restructuring of the network of MNCs, concealing the real origin of the investor etc. increased the share of FDI in total going through third (fourth, fifth etc.) countries
- ▶ FDI breakdown data by nationality of investor, sector and activity yields decreasing amounts of useable information
- ▶ It has become less and less clear who really invests in a country
- ▶ Efforts of IMF and OECD to improve statistics, including FDI to reflect new economic realities
- ▶ BPM6 and BMD4 provide a useful tool – new data according to the ultimate owner of FDI

Conclusions and consequences for policy

- ▶ According to the new data and to the comparison of immediate and ultimate owner nationality data
- ▶ Differences in main investor countries (Germany, US dominates, and more „even” distribution among others, extra-EU overall higher; lower share of EU, esp. for HU and PL)
- ▶ Certain EU-countries mainly „intermediates” (Netherlands, Luxemburg, Austria, Ireland)
- ▶ Consequences for economic policy (influence of which country’s policies/changes in the business environment; considerations for FDI promotion etc.)
- ▶ (International: fighting fiscal erosion due to tax optimisation may be easier than previously thought – as the concentration is quite high....)

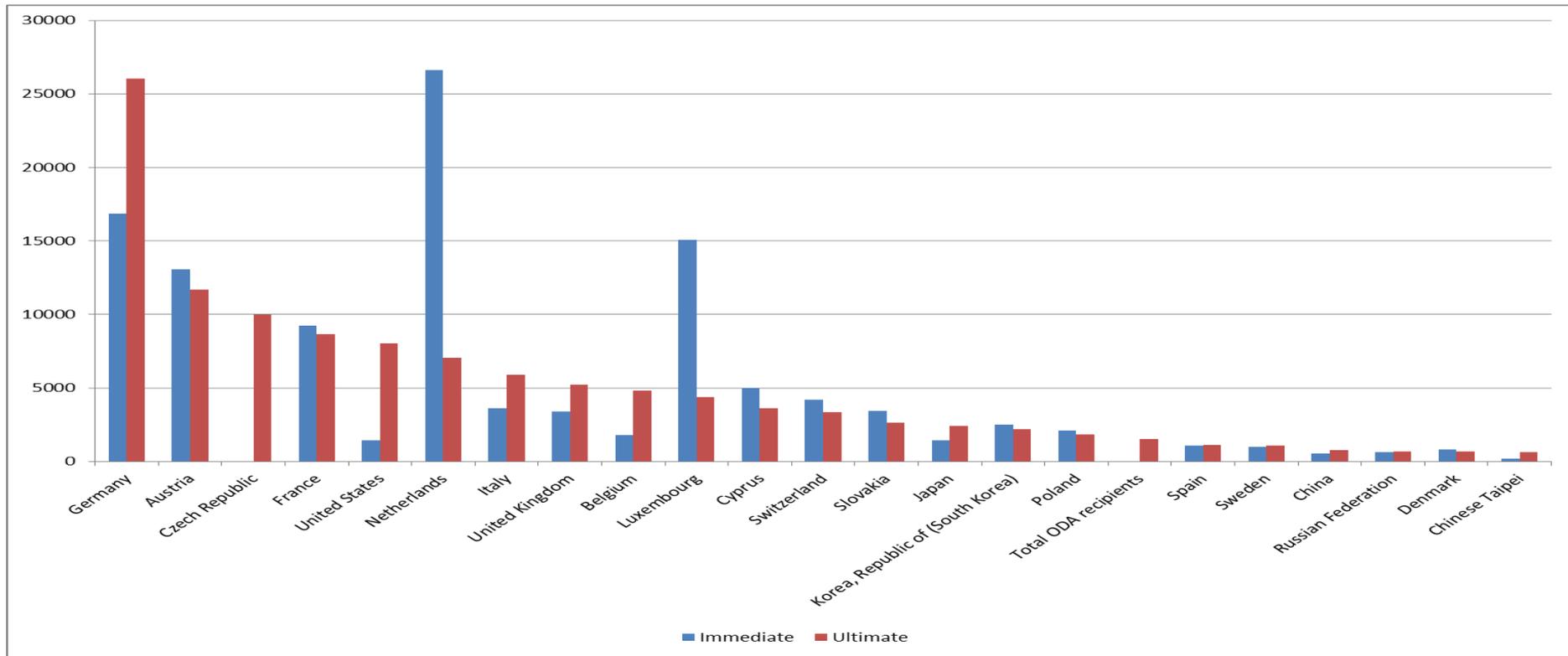
Future research

- ▶ Impact on intermediary countries (HU...)
- ▶ Impact depending on real home countries
- ▶ Motivations
- ▶ Econometric models using data according to immediate and final/ultimate owner countries – work in progress; Other variables included (tax haven, HDI, relative measures of GDP, GDP per capita...)
- ▶ Web of FDI with double, triple... counting in the world economy – TiVA-type approach?

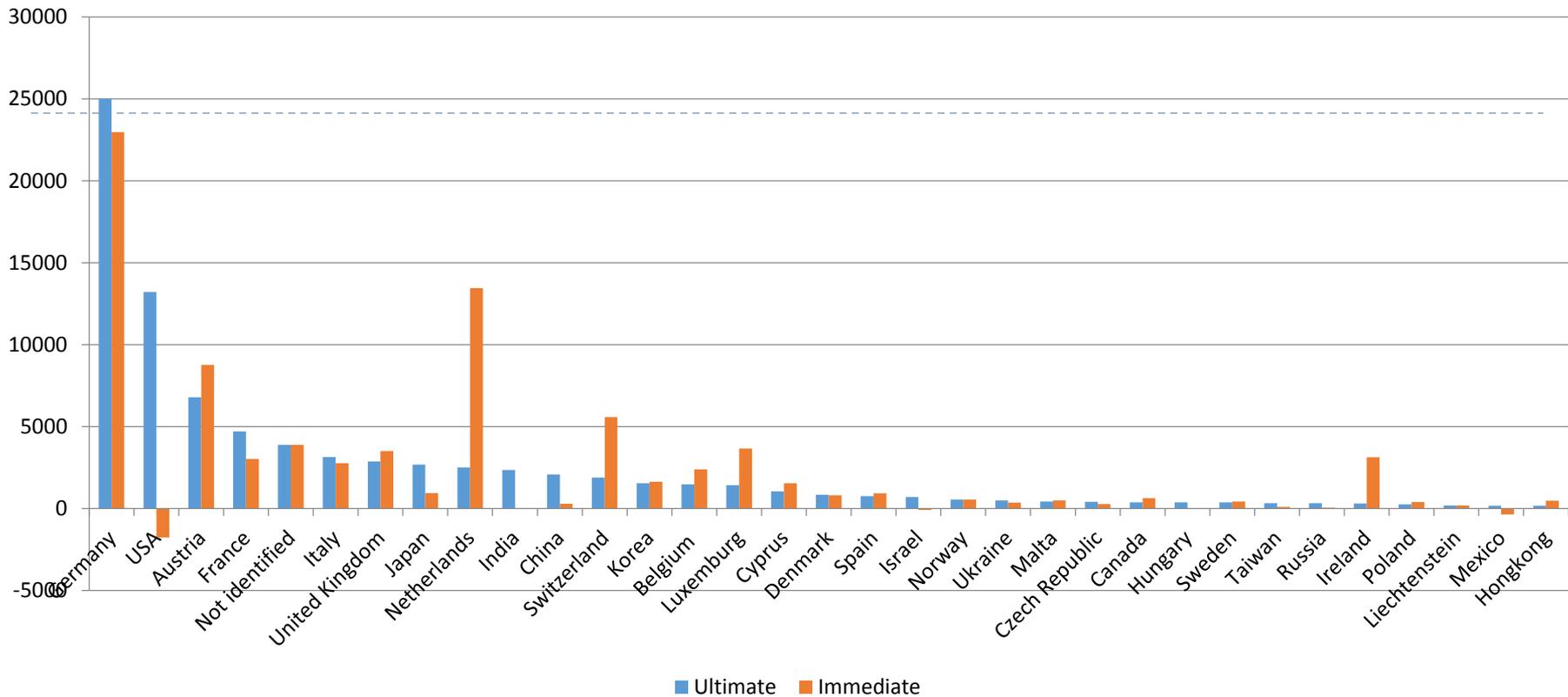
Thank you for your attention!

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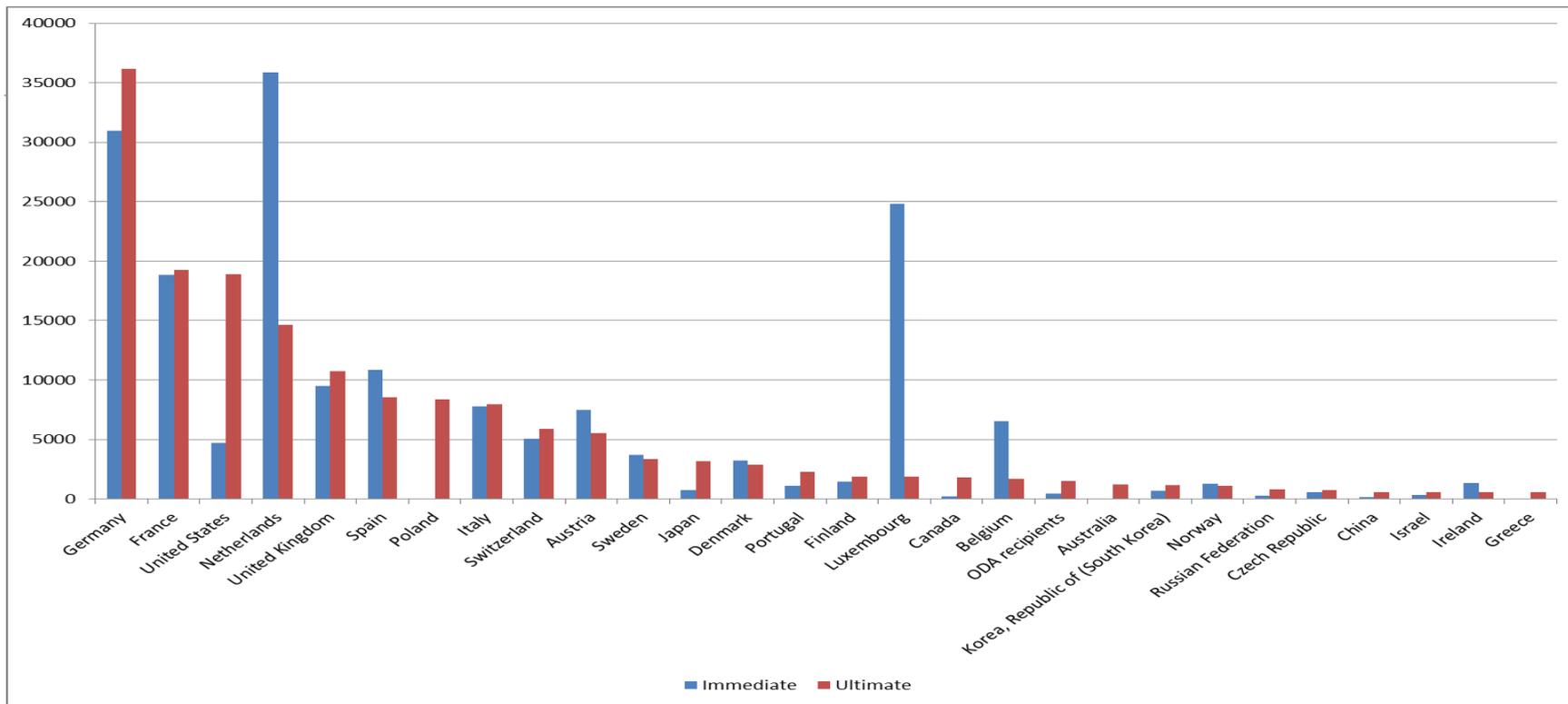


Immediate versus ultimate investors: Czech Republic (2016, million USD, OECD)



Immediate versus ultimate investors: Hungary (2016, million USD - HNB)

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Immediate versus ultimate investors: Poland (2016, million USD, OECD)