



Different Choices, Divergent Paths: Poland and Ukraine

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Prepared for *Fault lines after Covid:
Reykjavik roundtable on global economic challenges*
Institute of International Affairs, University of Iceland
Reykjavik, Iceland, 1-2 September 2022

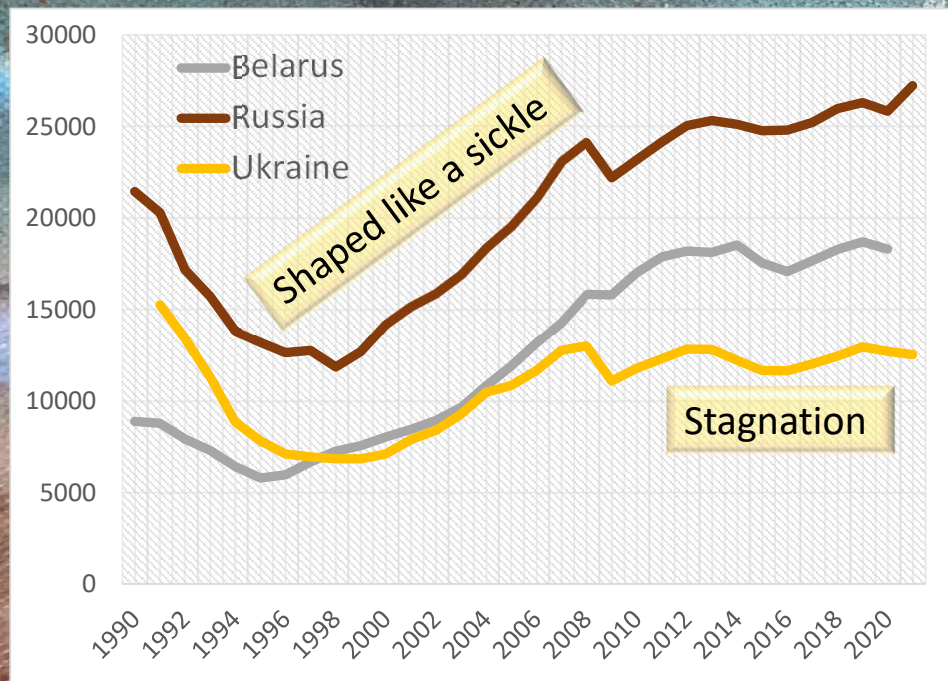


Precursor: Baltic trilogy

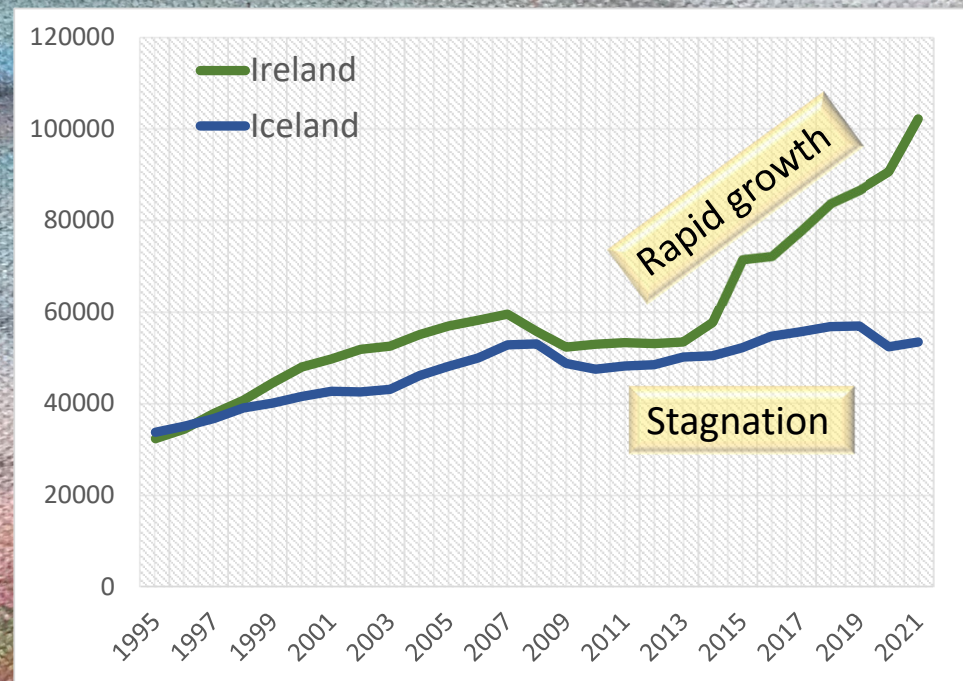
1. Growing apart? A Tale of Two Republics: Estonia and Georgia
European Journal of Political Economy (2009)
2. Growing Together: Croatia and Latvia
Comparative Economic Studies (2011)
3. To Grow or Not to Grow: Belarus and Lithuania
Comparative Economic Studies (2022)

Belarus, Ukraine, Russia, and more

GNI per capita 1990-2021
(USD, ppp, constant 2017 prices)



GDP per capita 1995-2021
(USD, ppp, constant 2017 prices)



Source: World Bank, *World Development Indicators* 2022.

Baltic trilogy in brief

Compares economic growth trajectories of Estonia, Latvia, and Lithuania with those of Georgia, Croatia, and Belarus ...

... to try to understand the extent to which observed growth differentials could be traced to ...

... increased efficiency in the use of capital and other resources (intensive growth) rather than to ...

... brute accumulation of capital (extensive growth)

Emphasis on role of education, governance, and institutions

Did EU perspective and NATO play a role?

Similar approach to Ukraine vs. Poland

Closely related histories, long border (535 km)

Stark differences

- Inclination toward EU vs. Russia
 - Maidan revolution, invasions of 2014 and 2022
- Full vs. incomplete transition to market economy
- Democracy vs. anocracy

Research strategy

Compare key determinants of growth and growth trajectories

Try to disentangle efficiency and accumulation with a broad brush ...

... and combine path dependence and creative destruction

Statistics vs. stories

Ukraine vs. Poland: Growth trajectories

Key comparisons

Per capita GDP at PPP

About the same in 1989 (Kowalski 2013)

Or 45% higher in Ukraine (World Bank *WDI* 2022)

In Poland, stable growth since 1992, more than threefold rise

Poland had shortest and mildest transformation recession among CEEs

In Ukraine, stagnation or rather decline since 1990

Concerns about quality of data

Life expectancy

Similar in the two countries in 1960 and 1990

After 1990, sharp drop in life expectancy in Ukraine

By 2021, the life expectancy differential had grown to 5.5 years in Poland's favor – 76.5 years in Poland vs. 71 years in Ukraine

Key economic and social indicators go hand in hand

Ukraine vs. Poland: Growth trajectories

In Ukraine, it took output at PPP ten years to reverse its initial decline, while Poland grew steadily from 1992 onward

Ukraine has not yet made a full recovery from collapse

In 1990, Ukraine's per capita GNI at PPP was 45% above that of Poland

Other sources say they were about the same in 1989

In 2021, Ukraine's per capita GNI at PPP was 60% below that of Poland

Poland's growth trajectory matches CEE, but Ukraine lags behind, as does Russia

Did Poland's experiment with shock therapy work?

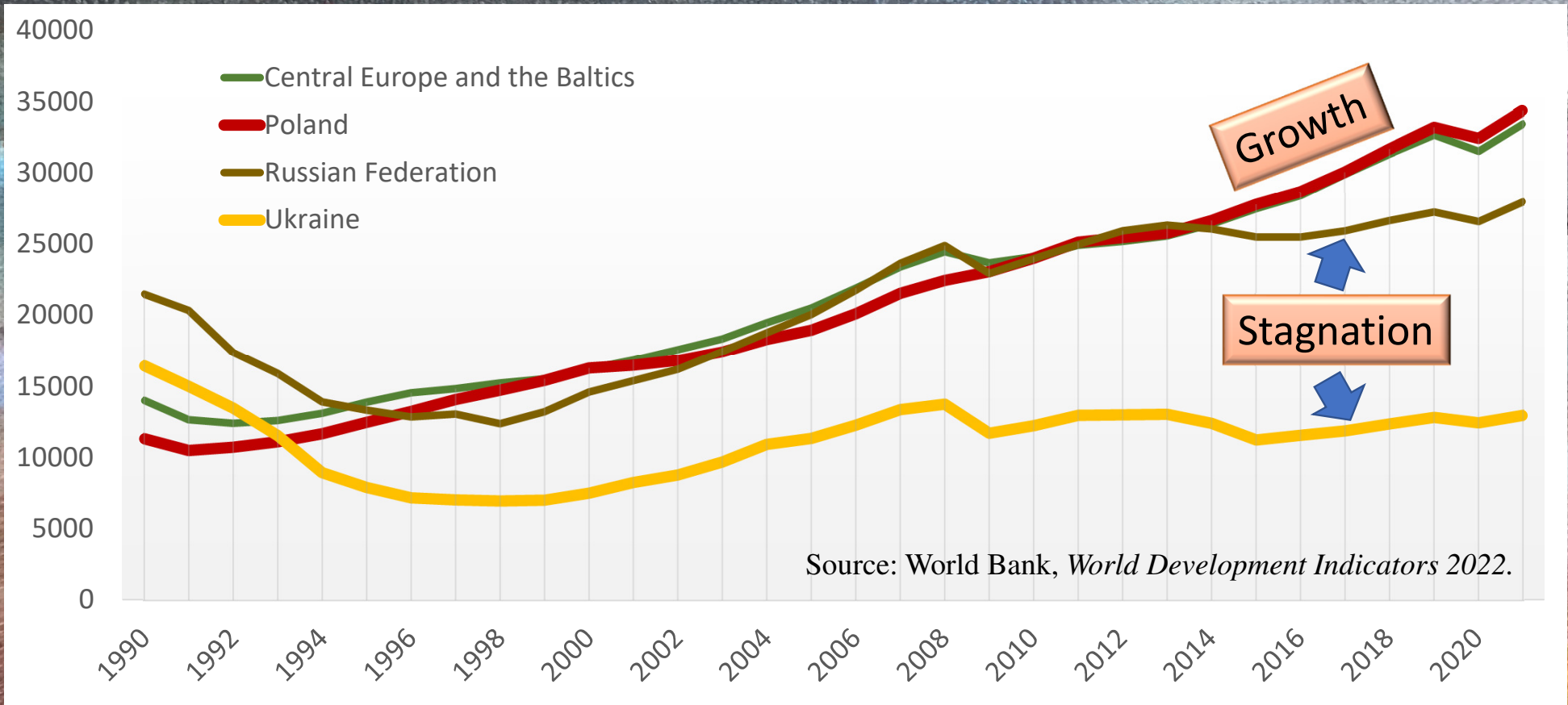
Since 1990, Poland's population has been stagnant at 38 million

From 1990 to 2021, Ukraine lost about 15% of her population to migration

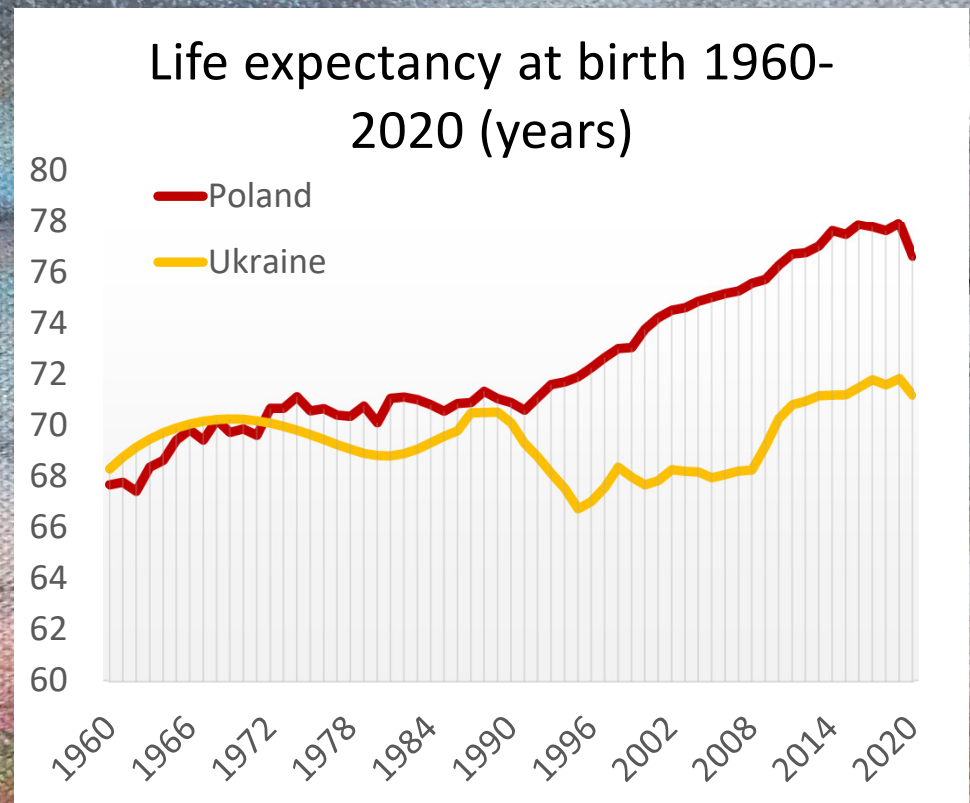
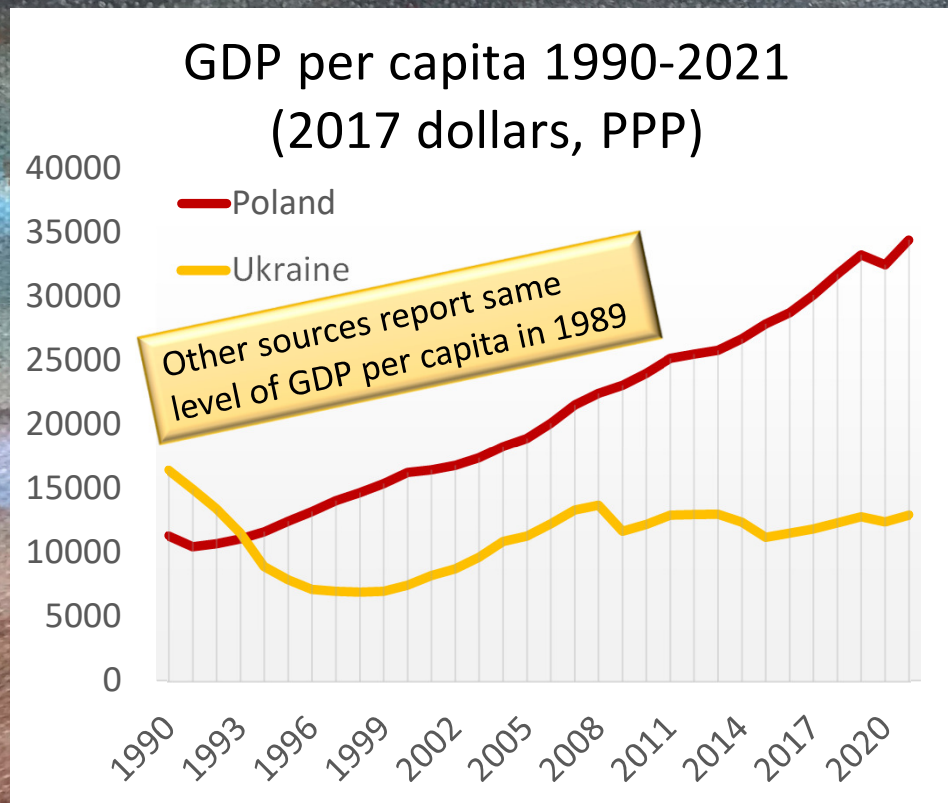
From 52 million in 1990 to 44 million in 2021

GDP per capita 1990-2021

(constant international 2017 dollars, PPP)



GDP per capita and life expectancy



Source: World Bank, *World Development Indicators* 2022.

Initial conditions and specification I

Specification	Ukraine	Poland
Program launch	Nov. 1994	Jan. 1990
Monetary policy	Restrictive	Restrictive
Fiscal policy	Restrictive	Restrictive
Incomes policy	Mild	Restrictive
Exchange rate policy	Devaluation	Devaluation
Nominal anchor	Managed floating rate	Fixed exchange rate and wage control
Real anchor	Money supply and interest rate	Interest rate
Internal convertibility (for companies)	Yes	Yes
Internal convertibility (for households)	Restricted	Yes
External convertibility	Very restricted	Restricted

Source: Kowalski and Shachmurove (2018).

Initial conditions and specification II

Specification	Ukraine	Poland
Main privatization method	Coupon	Direct
Date of starting privatization	1995	1990
Launch of stock exchange	1991	1991
Lowest level of GDP in year	1998	1991
Scale of decrease (1989=100)	36.6	82.2
Population in 1990 (million)	51.9	38.1

Source: Kowalski and Shachmurove (2018).

Classification of determinants of growth

Investment, trade, and education

Economic organization and industrial structure

Democracy and governance

Monetary and fiscal policy

Labor

Addendum: Covid response

Let us walk you
through the charts

Investment, trade, and education

Both countries invested about 21% of GDP on average during 1990-2021

Equal to OECD average, but far less than needed in both countries

Poland's investment ratio was less volatile while that of Ukraine declined over time

Net FDI inflows in both countries fluctuated widely and amounted to a bit less than 3% of GDP on average 1990-2020, a bit more in Poland than in Ukraine

Regional and sectoral structure of FDI

Poland's exports: 39% of GDP on average 1995-2021 vs. 47% in Ukraine

Poland's export ratio grew steadily after 1995 while that of Ukraine was stagnant

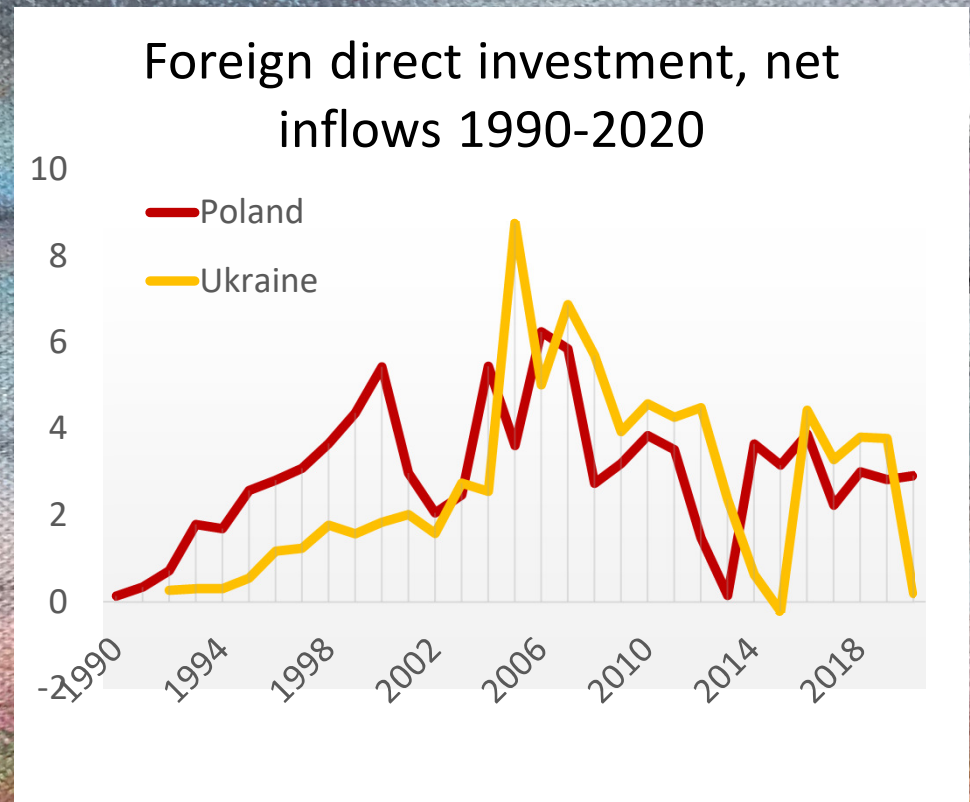
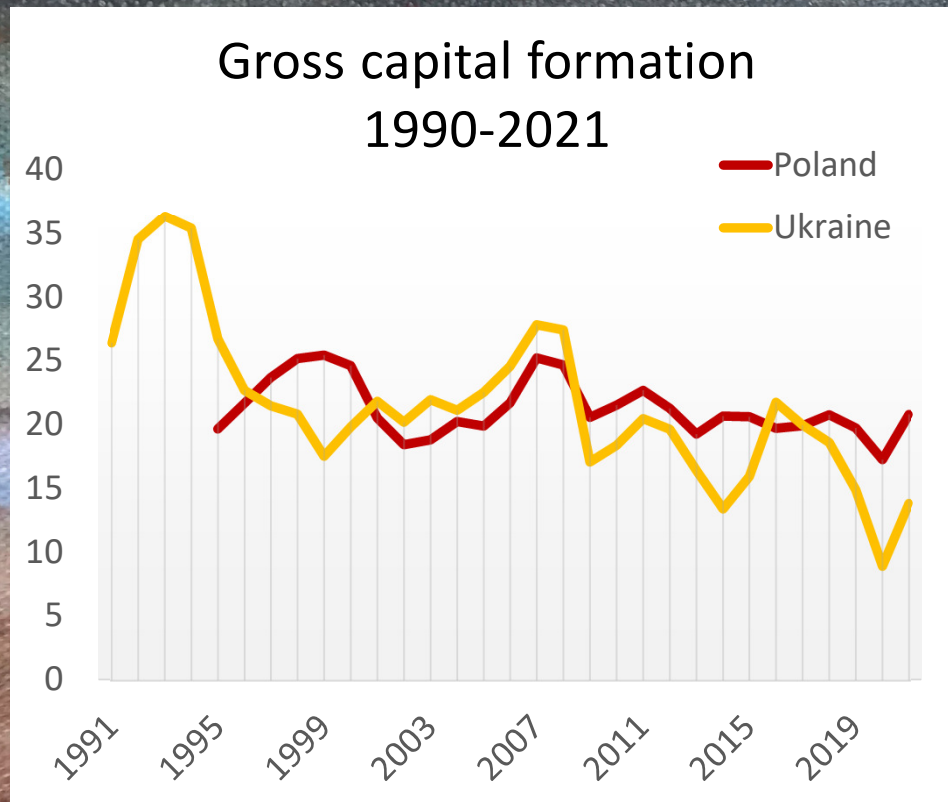
About 3/4 of Poland's exports go to EU, while China is Ukraine's largest foreign trade partner, followed by Germany, Poland, and Russia

Import restrictions were phased out in Poland, while Ukraine retains restrictions

Secondary school enrolment and internet use favor Poland, not Ukraine

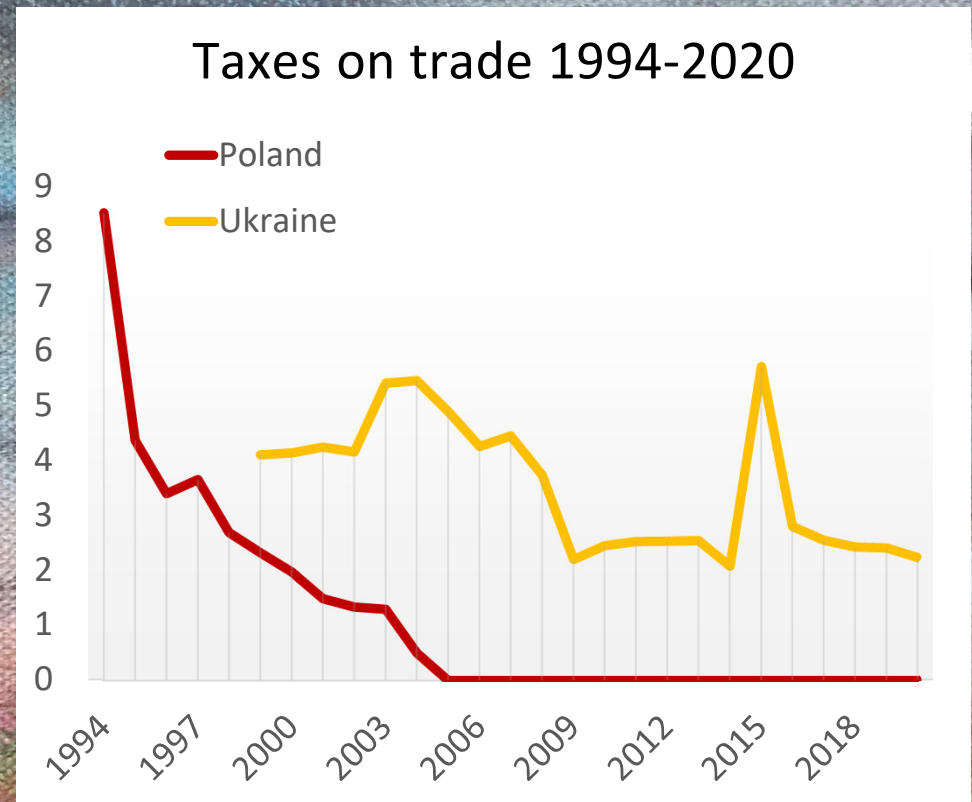
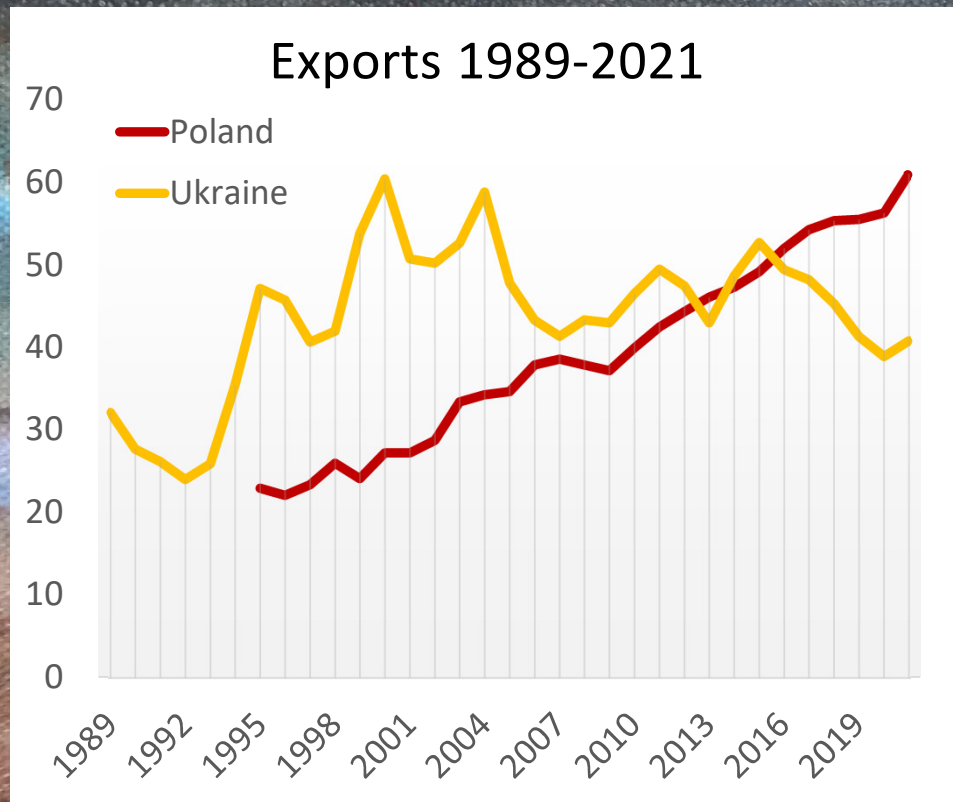
School life expectancy is 16 years in Poland vs. 15 years in Ukraine

Domestic and foreign investment (% of GDP)



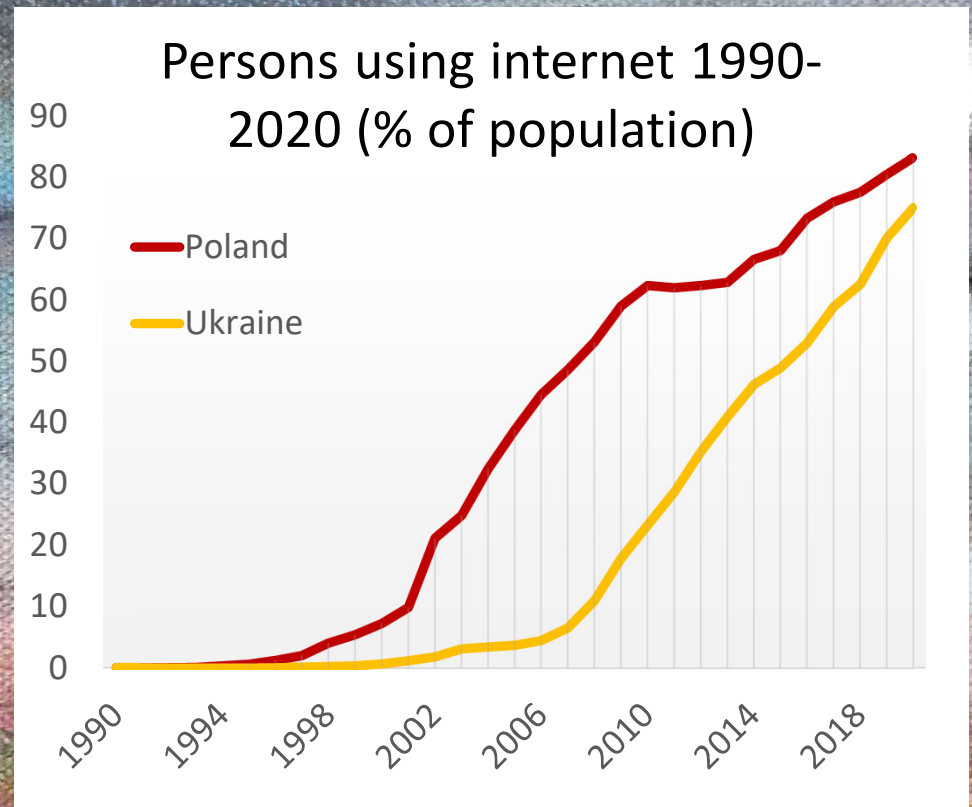
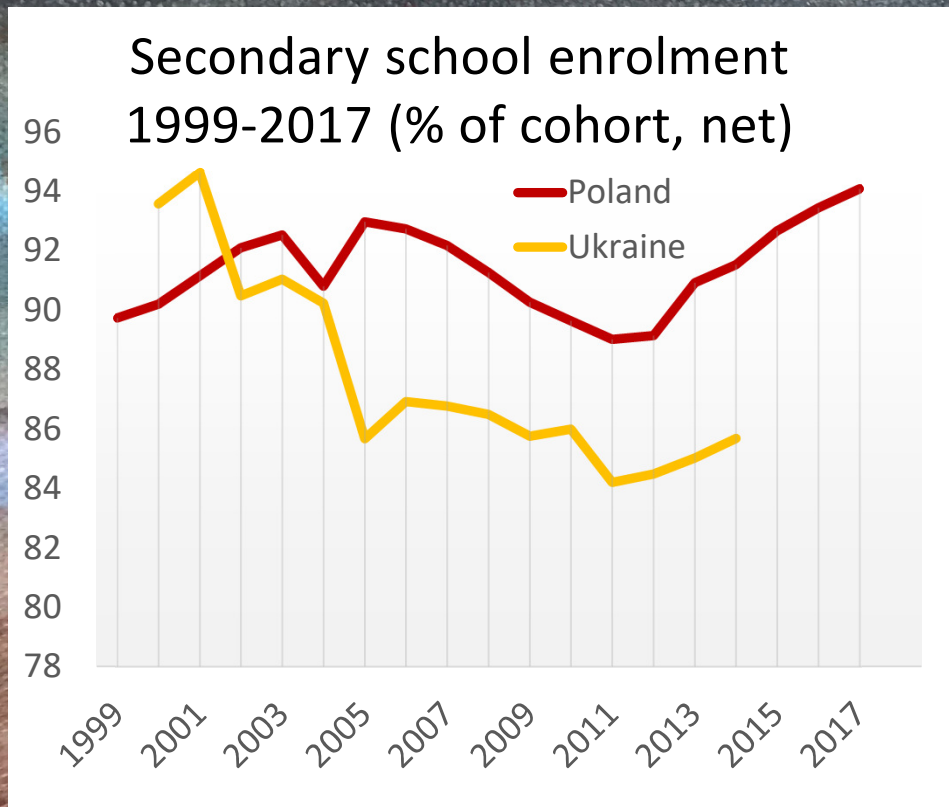
Source: World Bank, *World Development Indicators* 2022.

Exports and taxes on trade (% of GDP and of tax revenue)



Source: World Bank, *World Development Indicators* 2022.

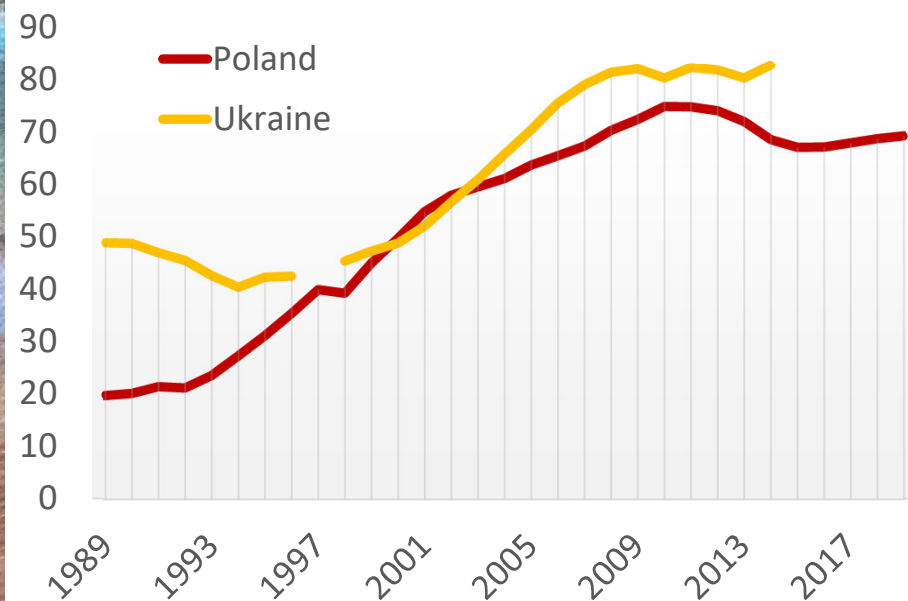
Education and internet use



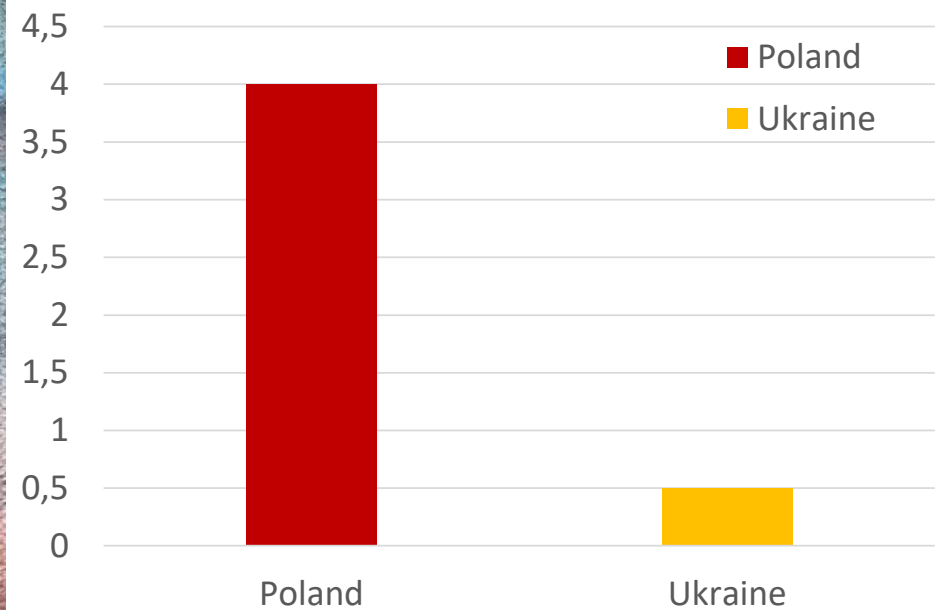
Source: World Bank, *World Development Indicators* 2022.

More on education

Tertiary school enrolment 1989-2019 (% of cohort, gross)



Ratio of science to law students



Sources: World Bank, *World Development Indicators 2022* and Natkhov and Polishchuk (2019).

Organization and structure

Exports from Poland are less concentrated and more diversified than exports from Ukraine

Share of agriculture in GDP has declined sharply in both countries

From 25% in 1991 to 11% in 2021 in Ukraine, a major exporter of wheat

From 6% in 1995 to 2% in 2021 in Poland

Share of manufactures in exports grew in Poland, but declined in Ukraine

Grew in Poland from 60% to 80% during 1992-2021

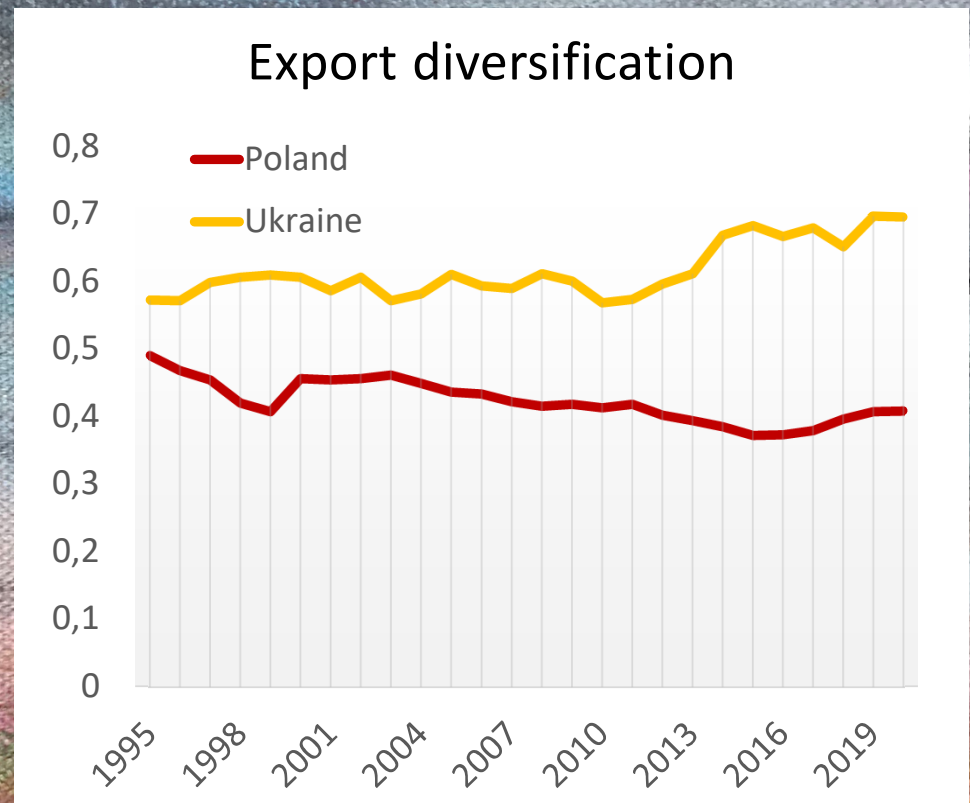
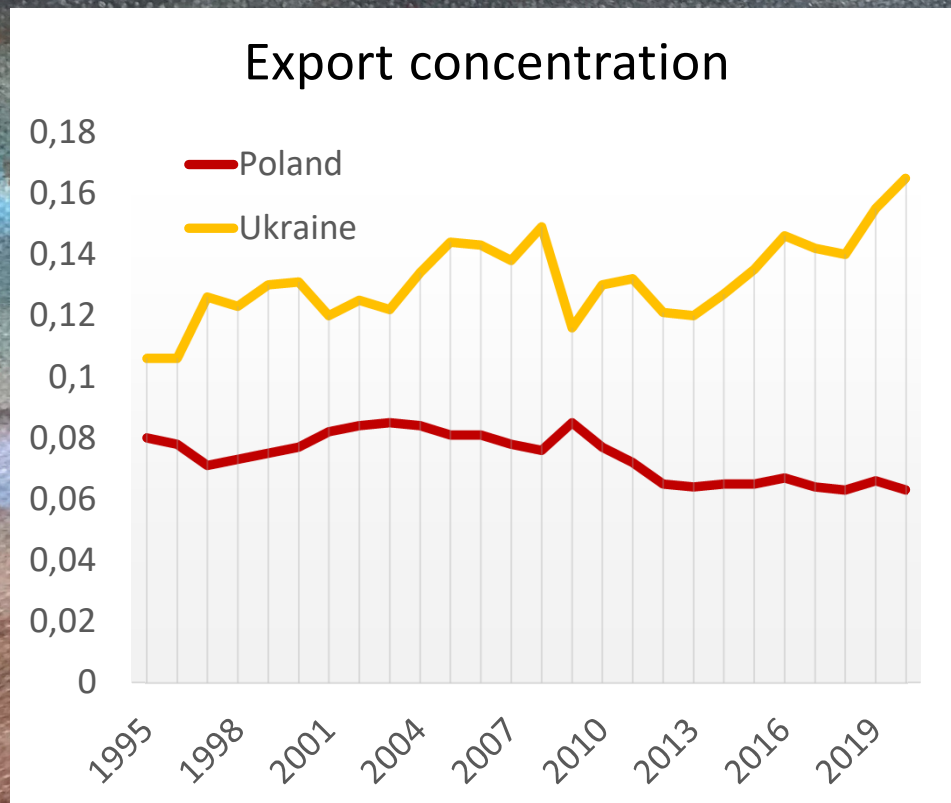
Declined in Ukraine from 66% to 43% during 1996-2021

Ease of Doing Business Index puts Poland in 40th place in 2020, far ahead of Ukraine in 64th place among 190 countries

Poland is ahead of other EU member countries such as Croatia (51st), Hungary (52nd), and Italy (58th) in the ranking

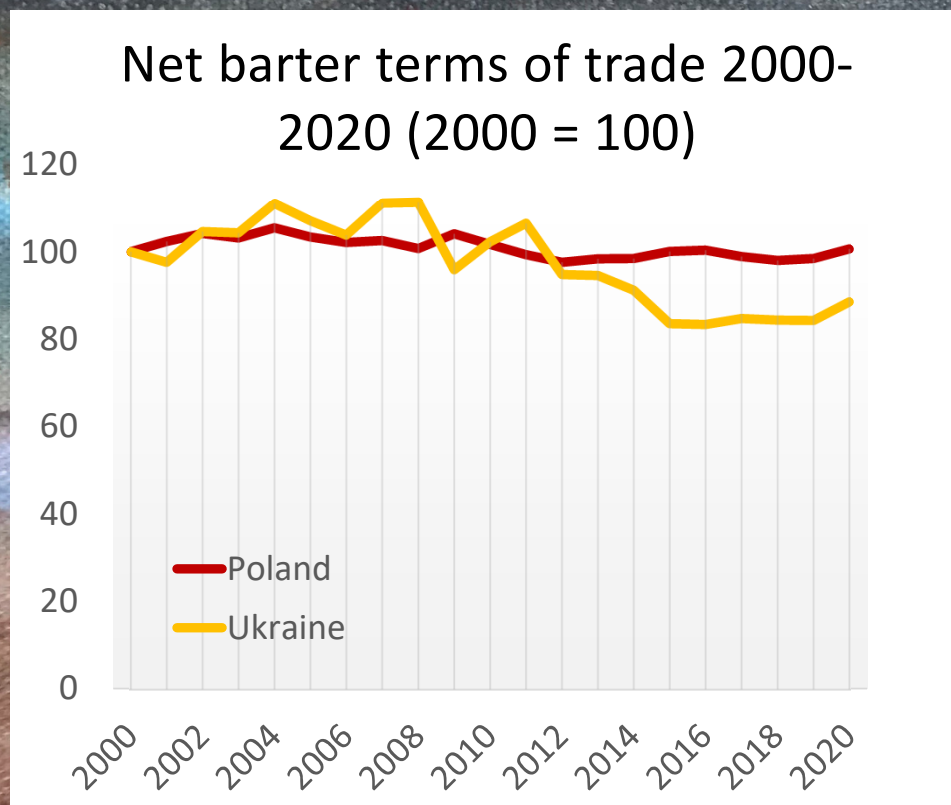
Export concentration and diversification 1995-2020

(indices from 0 to 1, higher values mean more concentration and less diversification)



Source: UNCTAD.

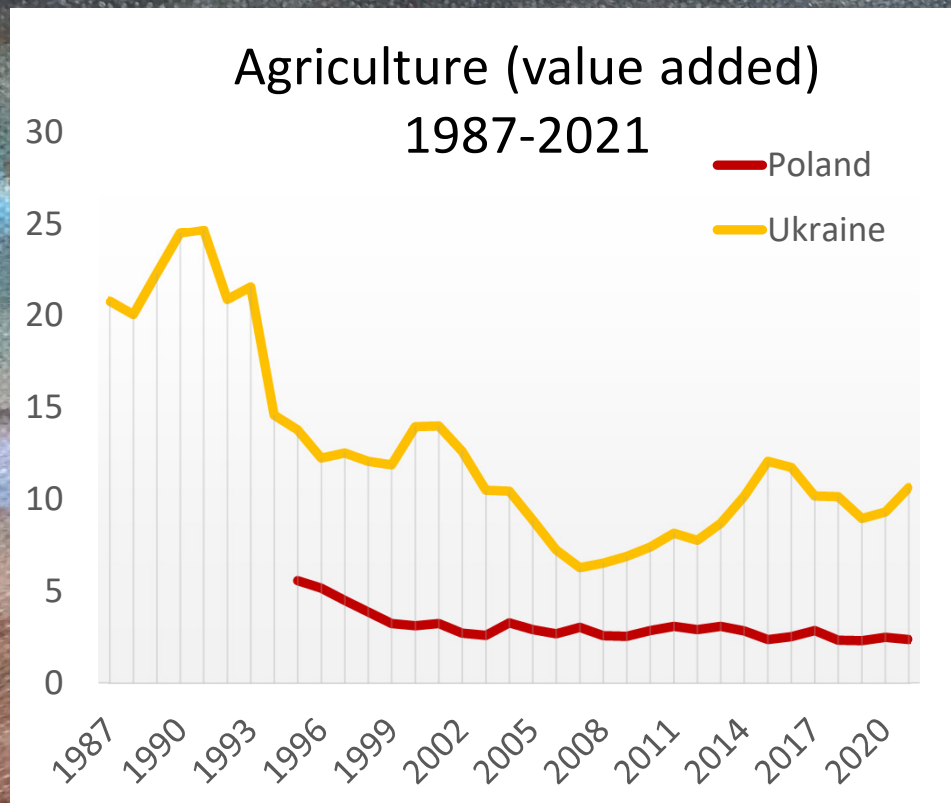
Terms of trade and real exchange rates



Source: World Bank, *World Development Indicators* 2022.

Agriculture and manufactures

(% of GDP and of exports)



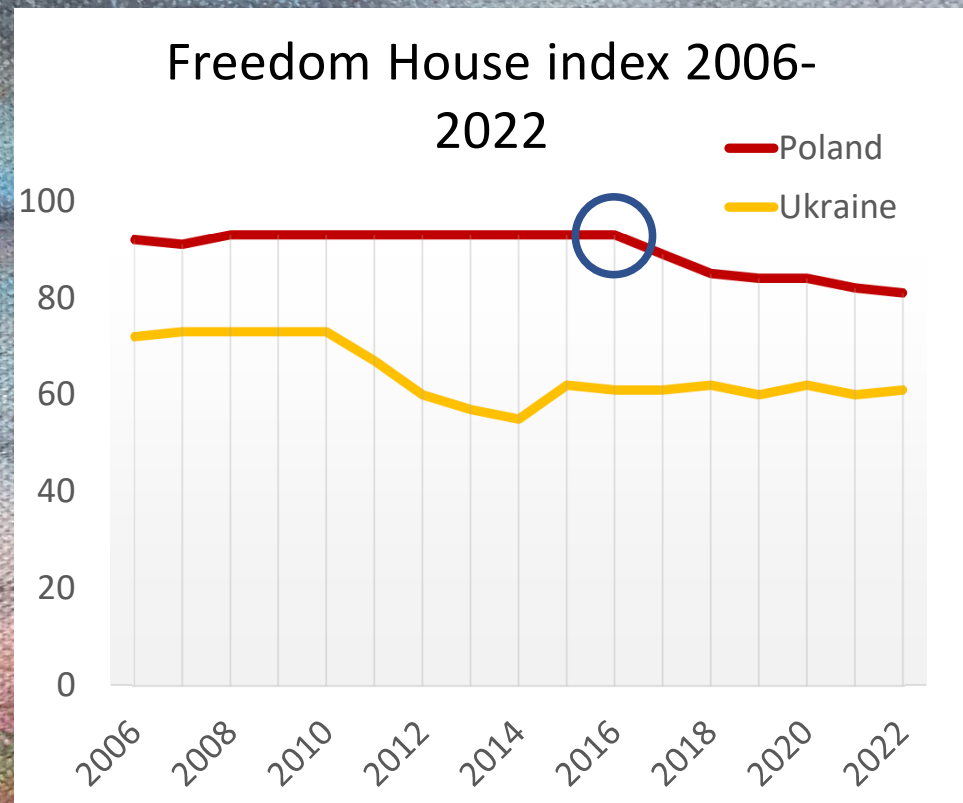
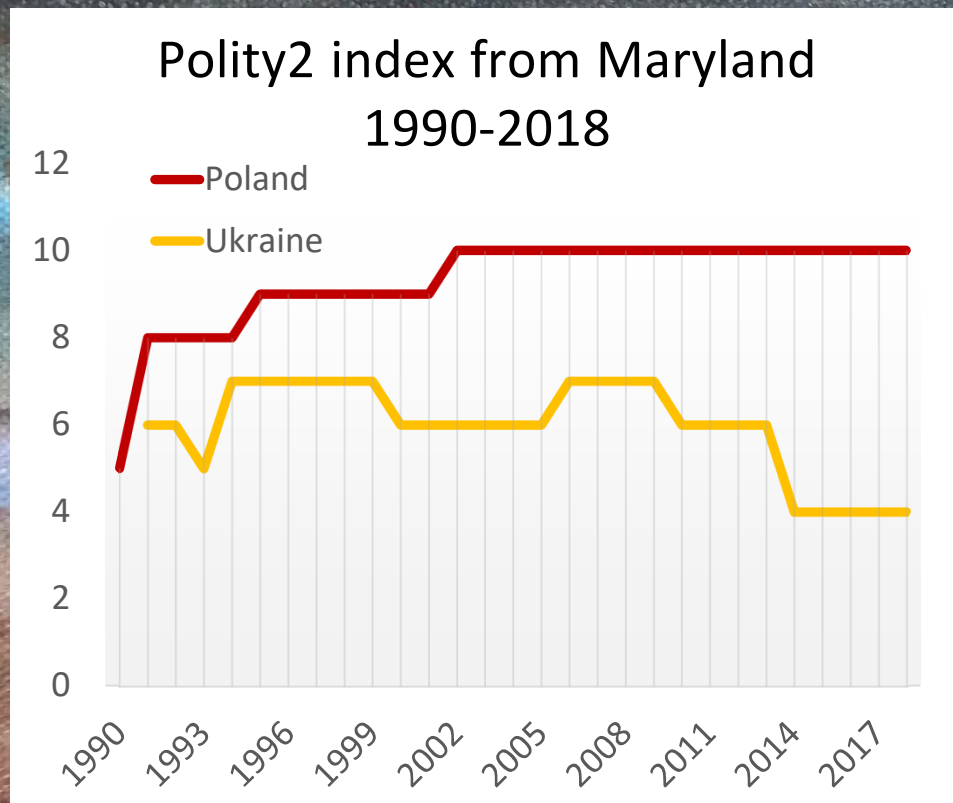
Source: World Bank, *World Development Indicators* 2022.

Democracy and governance

Both countries have a complex relationship with democracy

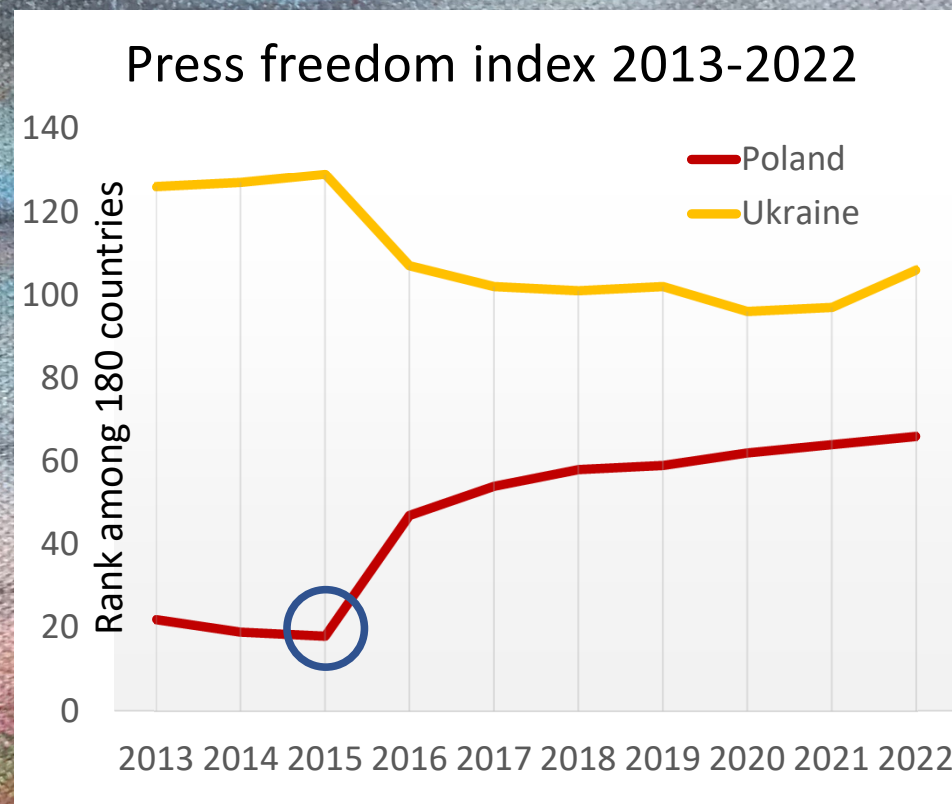
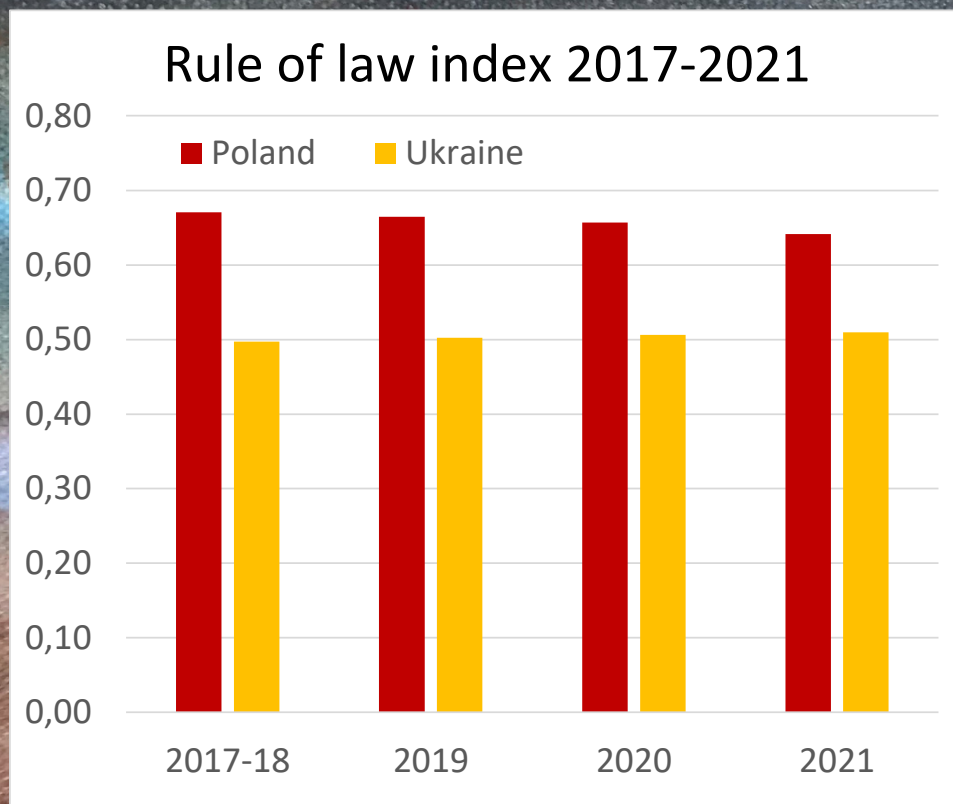
- Freedom House awards Poland a democracy score of 81 out of 100 in 2022, down from 89 in 2017, while Ukraine scores 61, unchanged from 2017
- Heritage Foundation ranks economic freedom in Poland 39th among 177 countries compared with Ukraine's rank of 130th
- Transparency International considers Poland much less corrupt than Ukraine, registering small gains in Ukraine since 2013 and losses in Poland since 2015
- Poland is less egalitarian than Ukraine, and has stronger rule of law and more press freedom, which has declined in Poland since 2015 while advancing in Ukraine
- World Bank assigns Poland higher scores for public governance than Ukraine by an increasing overall margin
- In World Values Survey, Ukraine scores higher than Poland in terms of popular confidence in government as well as interpersonal trust

Democracy and freedom



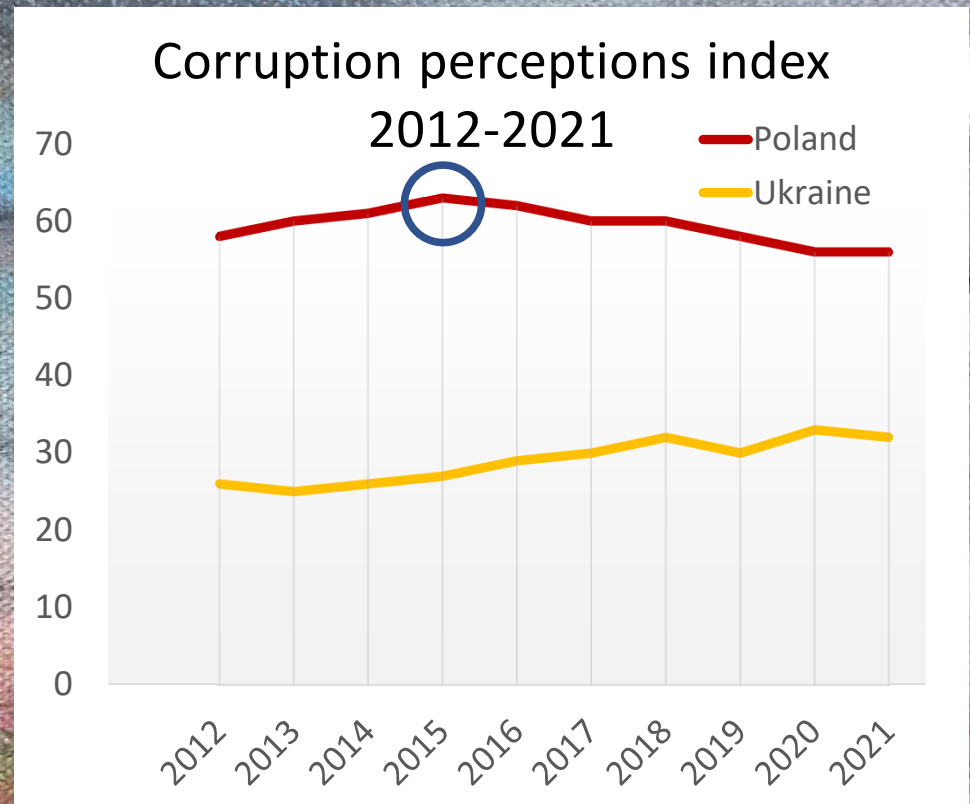
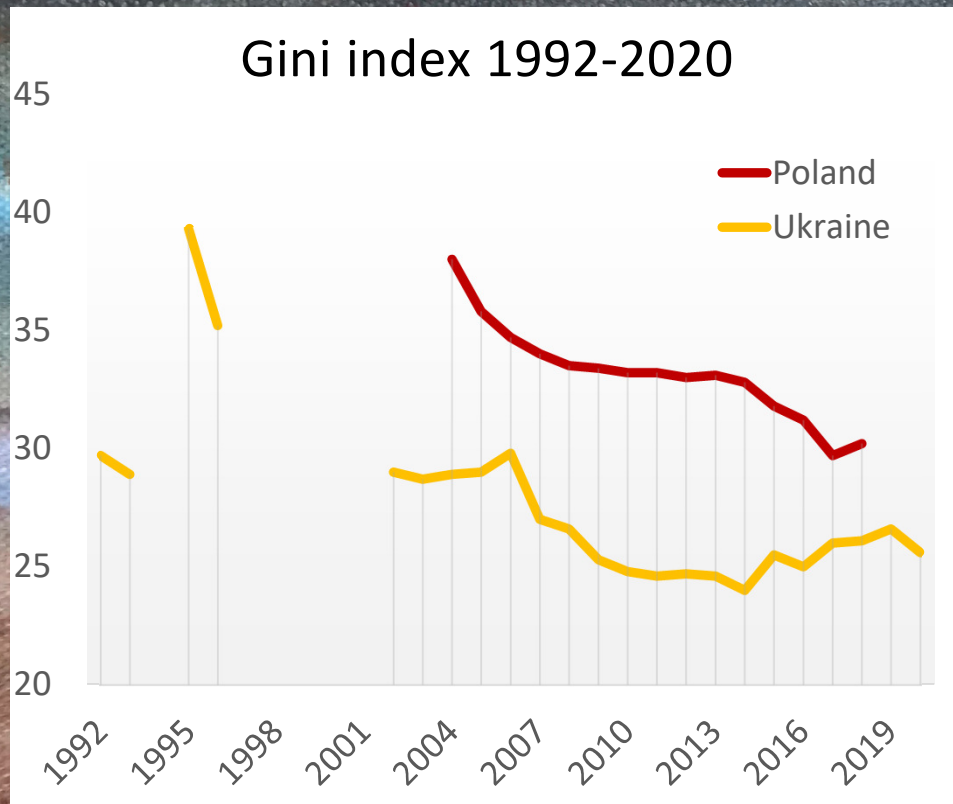
Sources: Center for Systemic Peace and Freedom House.

Rule of law and press freedom



Sources: World Justice Project and Reporters Without Borders.

Equality and corruption 1990-2020

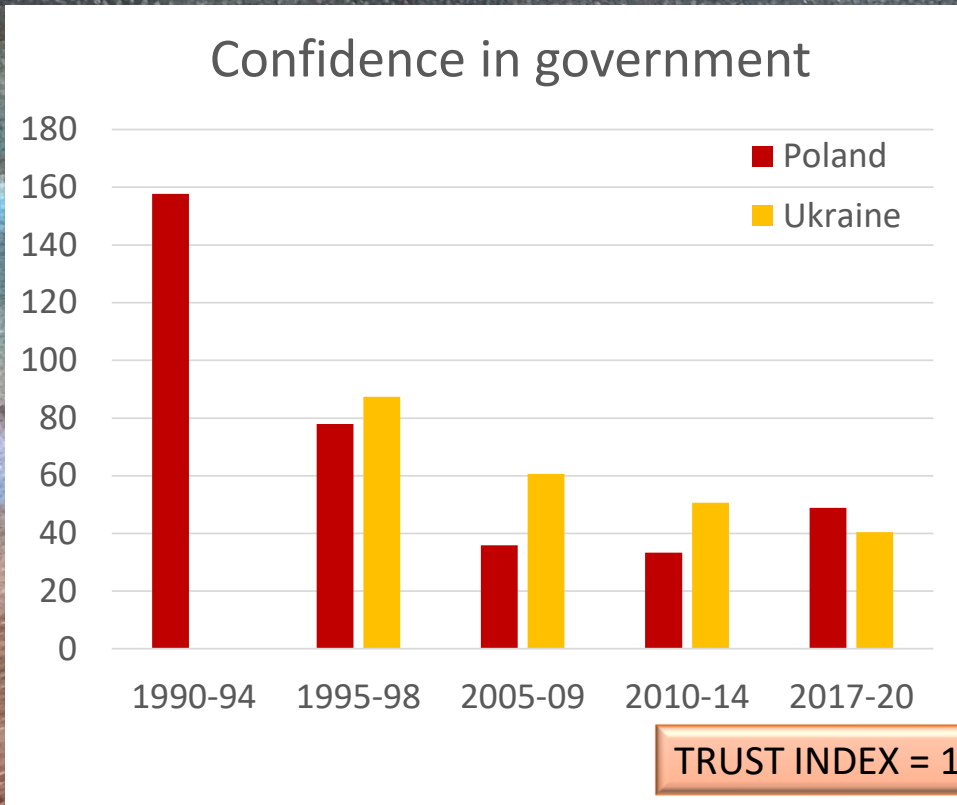


Sources: World Bank, *World Development Indicators 2022* and Transparency International.

Confidence and trust 1990-2020

We have doubts about the data for Ukraine

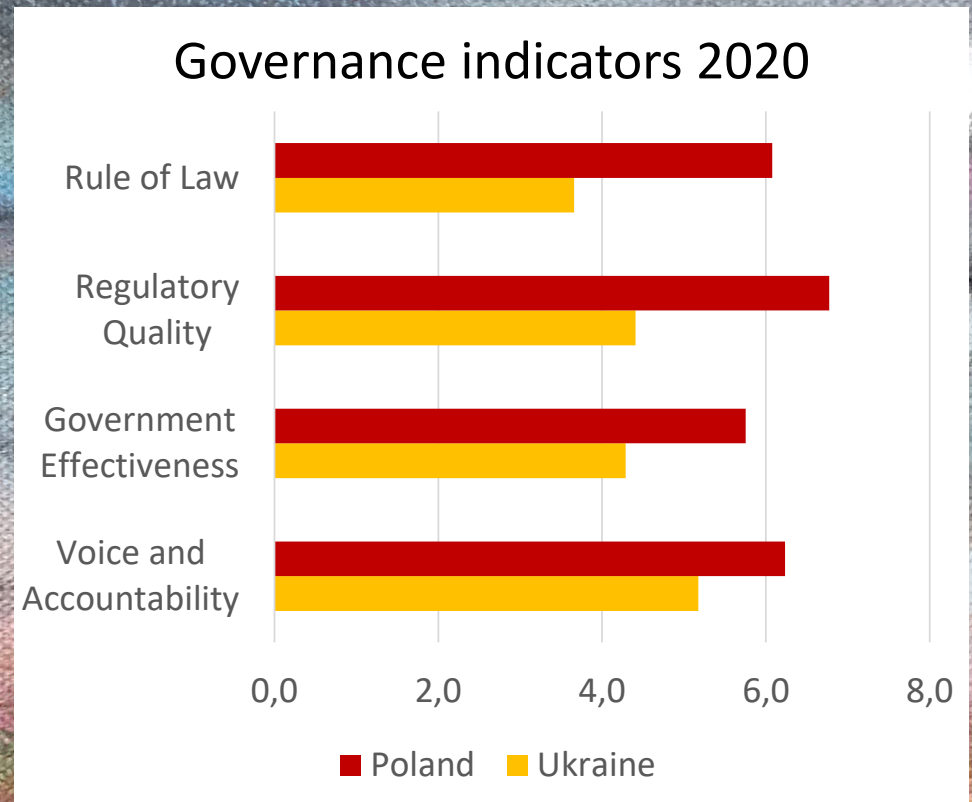
CONFIDENCE INDEX = 100 + (% Great deal or Quite a lot) – (% Not very much or None at all)



TRUST INDEX = 100 + (% Most people can be trusted) – (% Can't be too careful)

Governance 2010 and 2020

(various indicators)



Source: World Bank, *World Development Indicators 2022*.

Monetary and fiscal policy

After initial bout of hyperinflation, both countries managed to bring inflation down

- Poland brought inflation down to low single-digit figures from 2001 onward
- Ukraine had greater difficulties, registering 13% annual inflation on average 1997-2021 compared with 4% in Poland
- IMF's financial development index for Poland exceeds that for Ukraine
- Poland has more financial depth as shown by broad money/GDP ratio

Monetary and fiscal policy were restrictive during transformation from plan to market

In Poland from January 1990

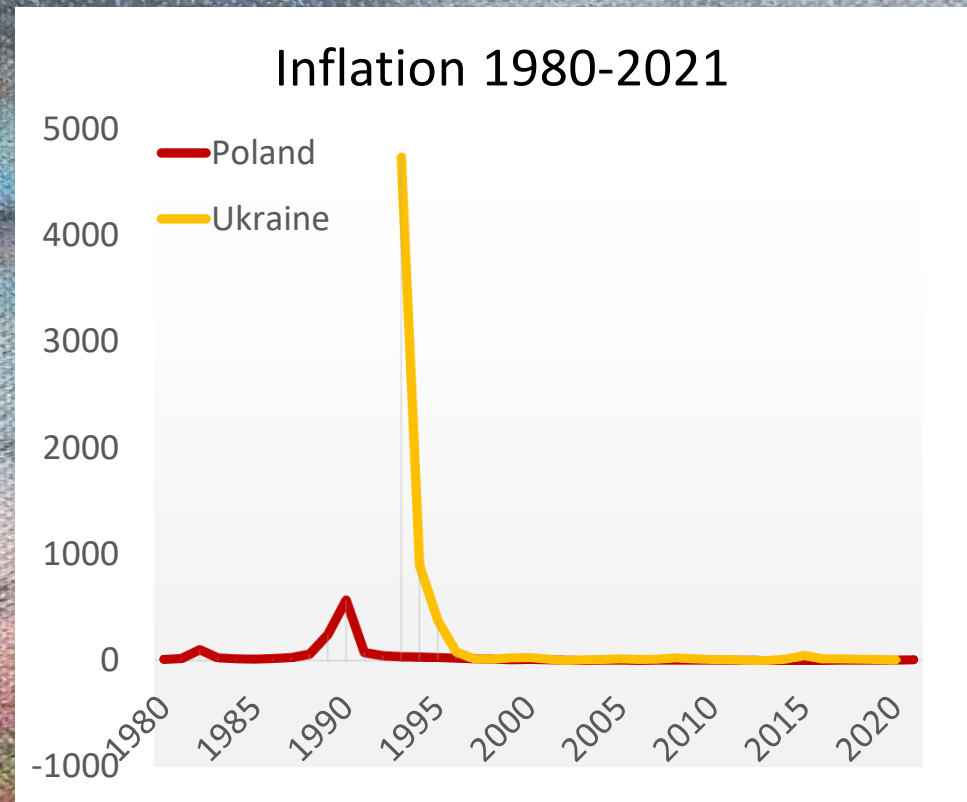
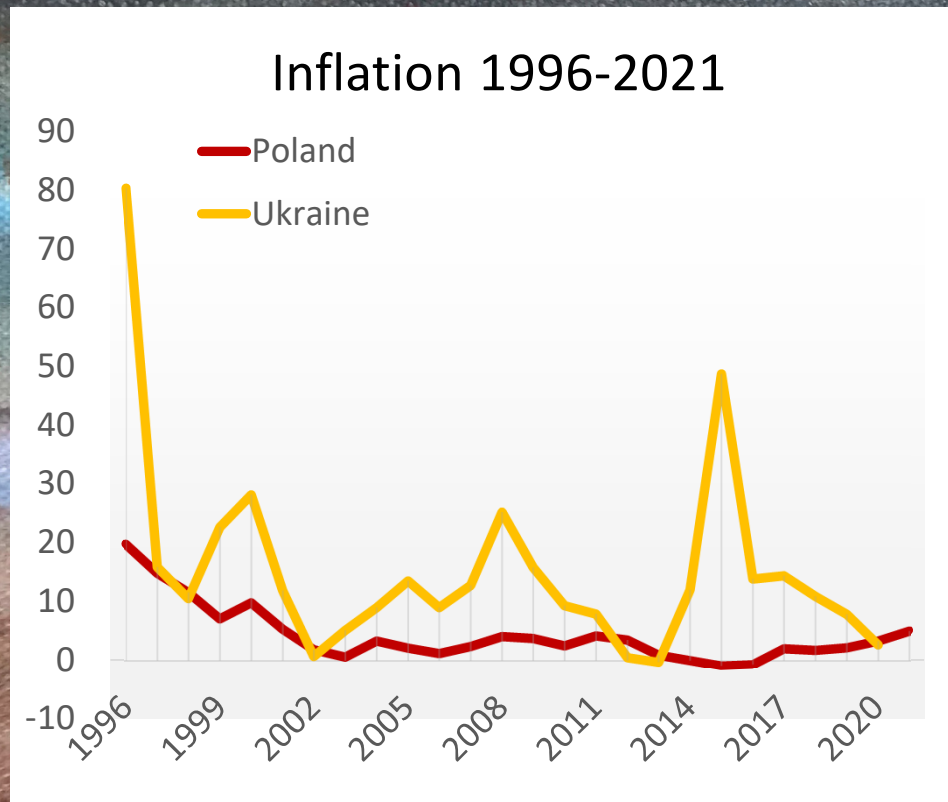
In Ukraine from November 1994

Privatization started in Poland 1990, in Ukraine 1995

Poland reacted more quickly

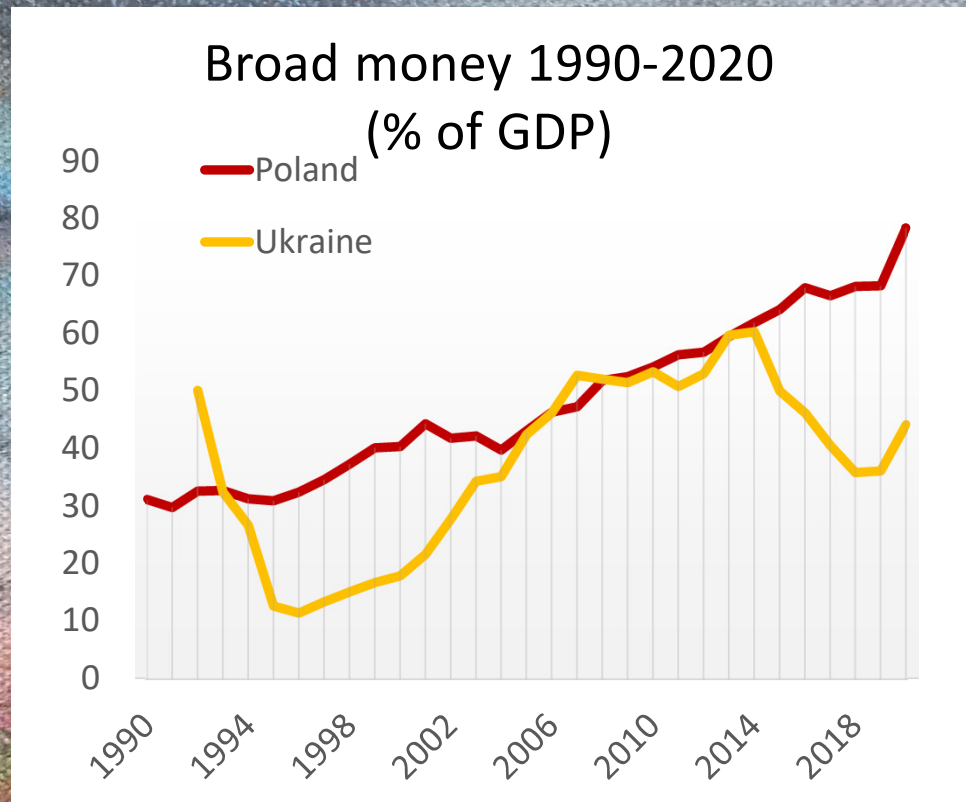
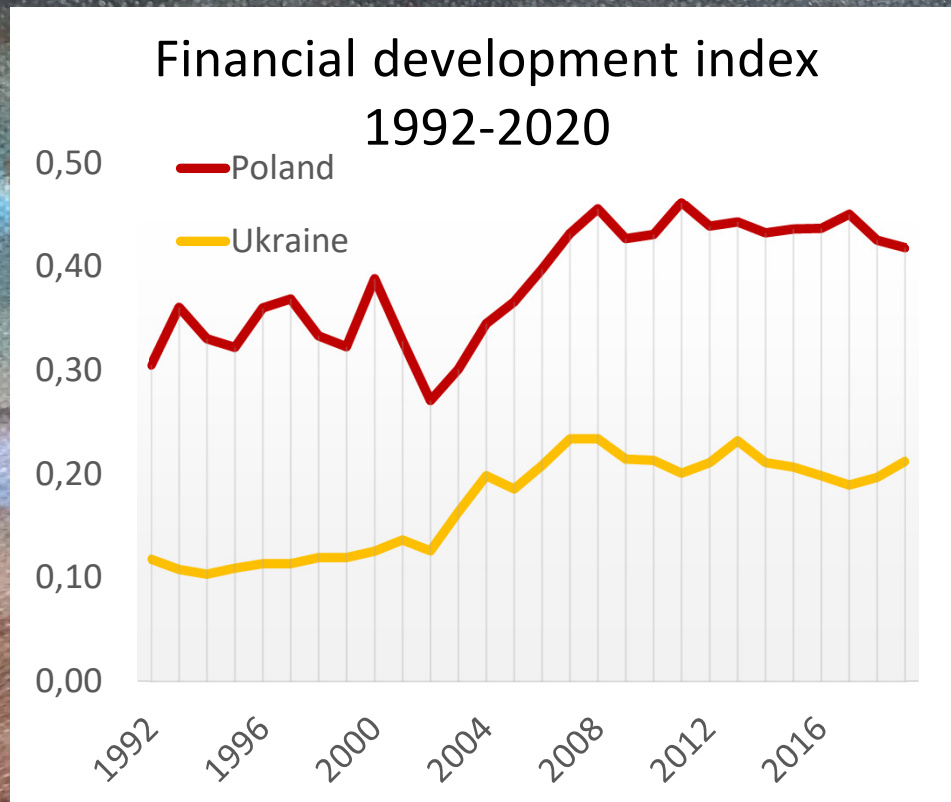
Inflation

(Consumer prices, % per year)



Source: World Bank, *World Development Indicators* 2022.

Financial development and depth



Sources: IMF and World Bank, *World Development Indicators 2022*.

Labor markets and unemployment

Labor force participation among 15-64-year-olds has been higher in Ukraine than in Poland

Poland had higher and more volatile unemployment than Ukraine during 1992-2001, or 11% vs. 9% on average

Both countries used to have high migration levels

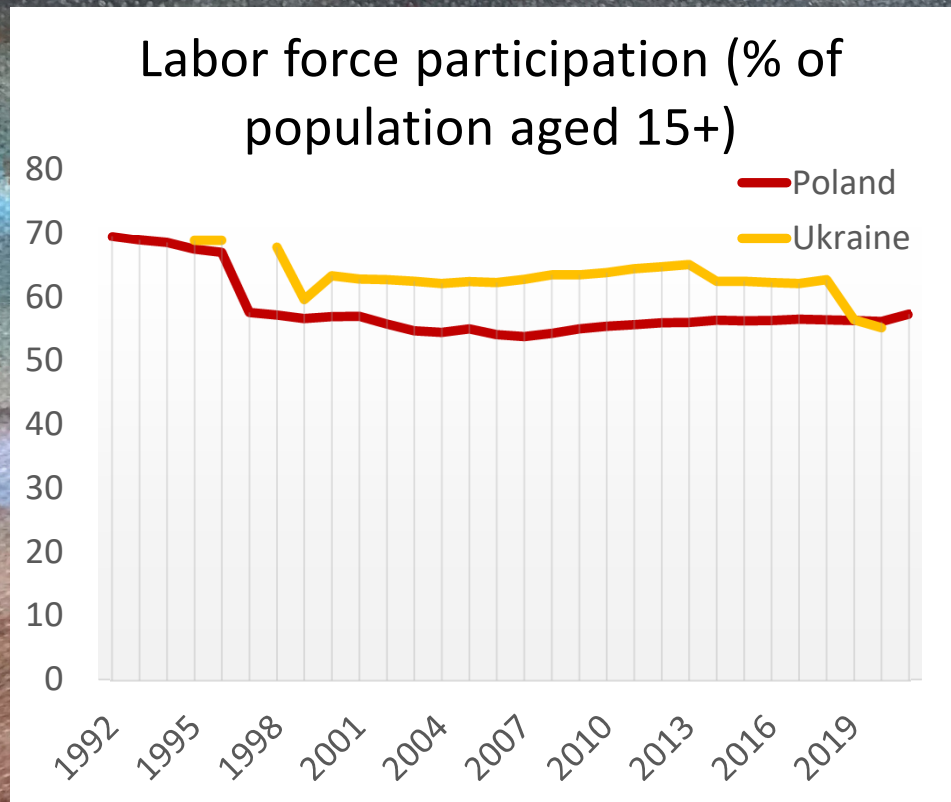
In earlier years, Ukrainian labor migrated to Russia and then to Poland

Before 2022 invasion, there was over million of Ukrainians working in Poland

After 2004, Polish labor migrated to other EU countries

Relatively low unemployment in Ukraine is partly due to stalled restructuring in Ukrainian manufacturing and mining

Labor force participation and unemployment 1992-2021



Source: World Bank, *World Development Indicators* 2022.

Addendum: Covid response

Modest contraction of GDP during 2020-2021

Poland had a bigger drop in GDP

Ukraine benefited from attracting fewer tourists after 2014

Macroeconomic countermeasures against global pandemic

Broadly similar in both countries

Source: IMF's Policy Tracker

Statistics show significant difference

Poland: 1 shot 59%, fully vaccinated 60%, deaths 3.1‰

Ukraine: 1 shot 36%, fully vaccinated 34%, deaths 2.5‰

Fewer deaths despite fewer shots

Summary

Nearly 3-fold difference in per capita GDP at PPP in 2021

Investment was too low but about the same in Poland and Ukraine

Poland had growing and diversified exports and few restrictions

Rest of difference must lie in human and social capital as well as economic structure

- More and better education in Poland
- More democracy, less corruption, better governance, freer press
- Less agriculture, more manufacturing
- Less inflation and more financial development

Against all this, Ukraine had

- More equality and less distrust
- Less unemployment
- Lower initial level of income

Poland wins!

Conclusion

Investment, exports, education

Investment in machinery and equipment relative to GDP was about the same
Poland had more vivacious and diversified exports plus fewer restrictions
Poland invested more in education: One extra year of schooling

Ukraine vacillated between cooperation with EU vs. Russia

Invaded by Russia in 2014, and again in 2022

Poland was motivated by EU perspective followed by integration

Liberalized trade

Restructured economy, privatized state assets

Built market-friendly institutions to EU specifications, joined NATO

Ukraine was hampered by political divisions

Corruption and poor governance

Halting democracy and haphazard human rights

The End