



JESSICA Urban Development Funds

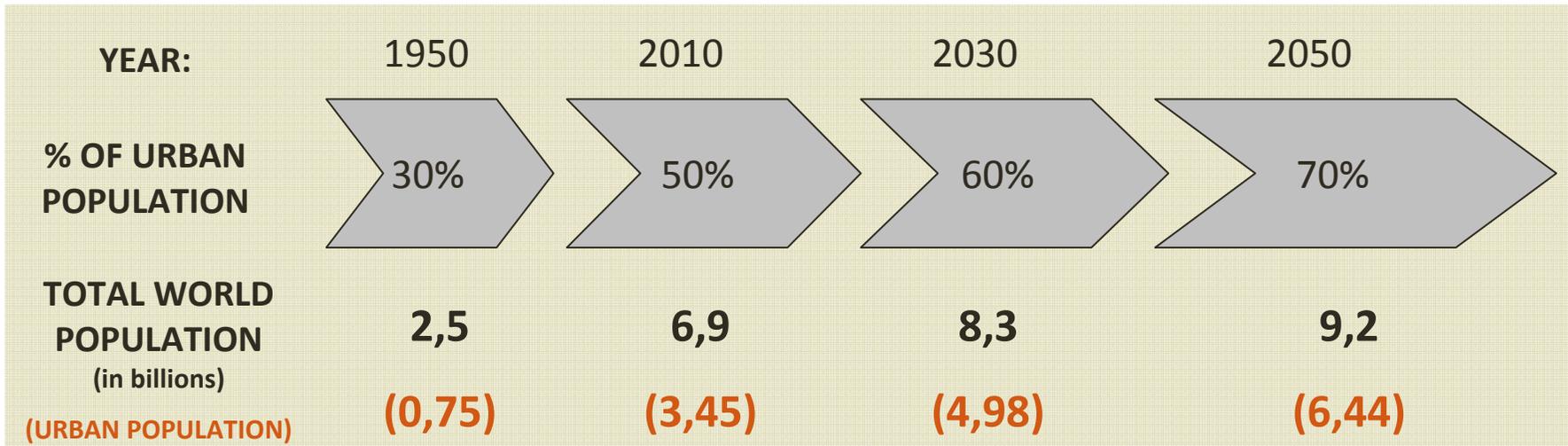
A EU policy vehicle supporting the sustainable transformation of European city areas

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Growing urban population



The global distribution of top 400 "urban areas" with at least 1,000,000 inhabitants in 2006

Impact funds for urban transformation...



City Positioning

Google Results

Sustainable cities	340,000
Liveable cities	275,000
Energy efficient cities	253,000
Mega cities	180,000
Green cities	156,000
Smart cities	107,000
Vibrant cities	93,100
Creative cities	86,200
Emerging cities	77,600
Innovative cities	74,100
Commuter towns	52,300
Inclusive cities	39,300
Attractive cities	31,800
Shrinking cities	31,500
Retirement cities	29,800
Dormitory towns	28,800
Resilient cities	28,500
Competitive cities	24,300
Compact cities	21,800
Affordable cities	13,100
Aging cities	6,930
Meta cities	3,570
Cohesive cities	1,870
Renewable cities	1,160
Lean/Durable cities	794



- How to support sustainable transformation processes of EU urban areas in a difficult economic and financial environment?
- What can be the delivery vehicle supplementing city budgets and improving the quality of the investment processes as well as the governance model of the transformation?
- How to measure the „impact“ of policy actions/ investment decisions in urban areas?

What is JESSICA?

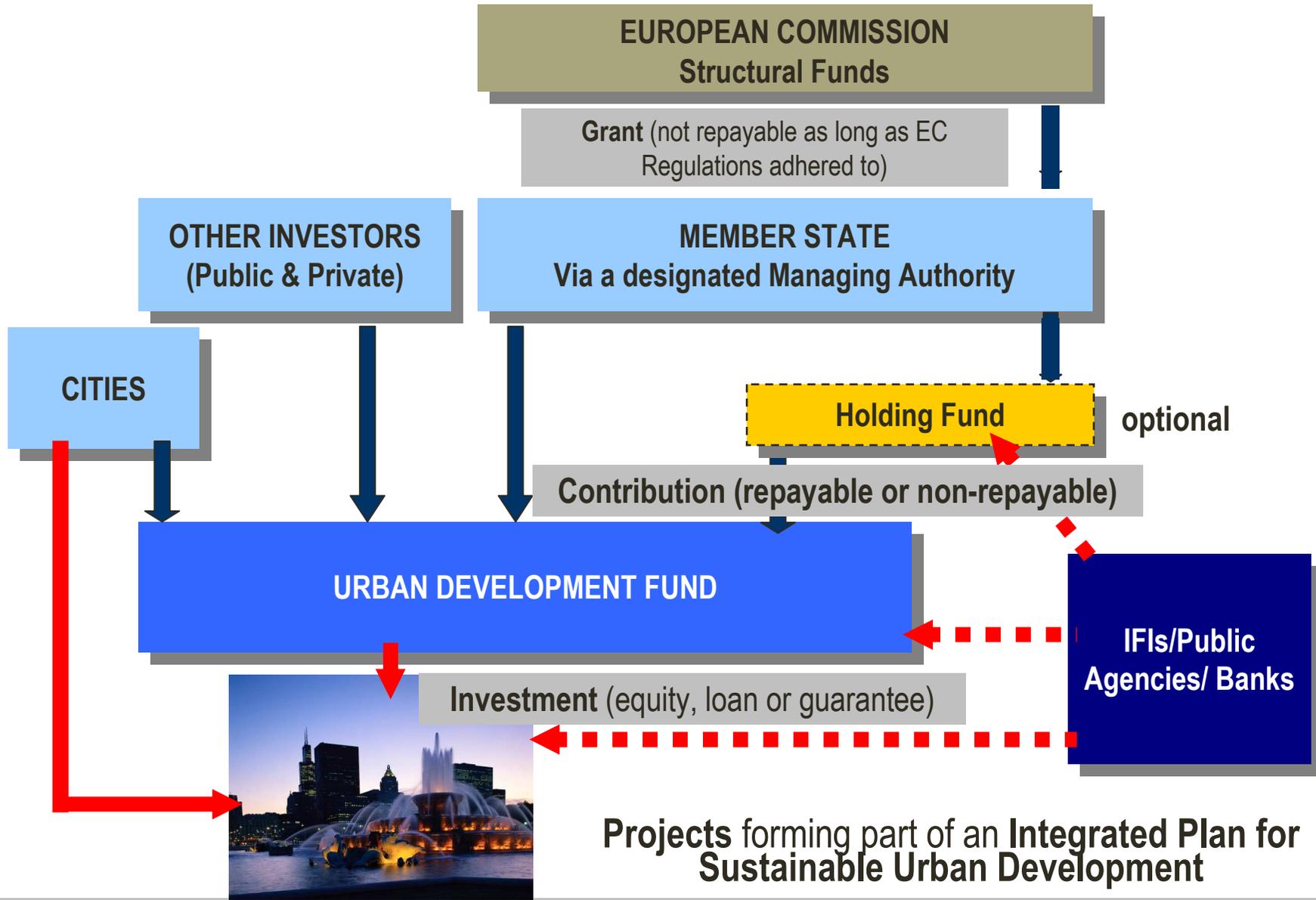


JESSICA: *Joint European Support for Sustainable Investment in City Areas*

Mission: To assist European cities in defining long-term, sustainable and viable patterns of development through investment activity financed with the utilization of “revolving” financial instruments.

- Initiative of the European Commission (DG REGIO) launched beginning of 2006, supported by EIB & CEB, to establish a common approach for financing urban development and strengthening the urban dimension in cohesion policy through the “transformation of grants” in repayable/recyclable assistance;
- Applying “financial engineering” techniques to EU Structural Funds;
- More efficient and effective utilisation of Structural Funds through tailor made “non-grant financial instruments” and mobilising additional financial resources;
- Financial and managerial expert support of international financial institutions (EIB, CEB).

General JESSICA implementation model



JESSICA Strategic objectives



1. To work on close cooperation with national and regional authorities and to provide specific support to urban areas through the allocation of Structural Funds, as well as adequate financial resources, appropriate managerial structures.
2. To help urban authorities in attracting private sector investment and additional resources at competitive terms in favour of sustainable urban transformation projects by creating preconditions crucial for private sector intervention (integrated urban plans, local economic modelling, project impact assessment analysis, risk-return assessment methodology and tools, etc.).
3. To enhance the efficiency and productivity of capital deployed in urban areas through the creation of a system of Urban Development Funds (“UDFs”) as well as by improving the processes of performance evaluation, rating and monitoring of urban change and investment.

UDFs as “*impact funds*” for urban transformation

*The terms “**impact funds**” or “**impact investors**” refer to investors and investment vehicles that have an interest, in addition to achieving remuneration to their investment, in achieving measurable “**impacts**” (in our definition “**sustainable ERR target**”) on policy-defined, non-financial objectives, constituting a key dimension in the investment vehicle performance assessment.*

Urban Development Fund (UDF) as an urban impact fund:

- **a specific policy tool** within the wider financial engineering concept in the programming period 2007-2013;
- to promote, by **employing Structural Funds in close cooperation with DG-REGIO**, the development of a system of financial engineering instruments (so-called Urban Development Funds) for urban development;
- **policy-driven, geographically-focused** and **planning-led** investment vehicle supporting the sustainable transformation processes of city areas;
- impact investing to be seen as **a new asset class** requiring specific investment skills, organisational structures, metrics and benchmarks.

Which types of UDFs?

- **Urban regeneration funds (mainly area-based)**

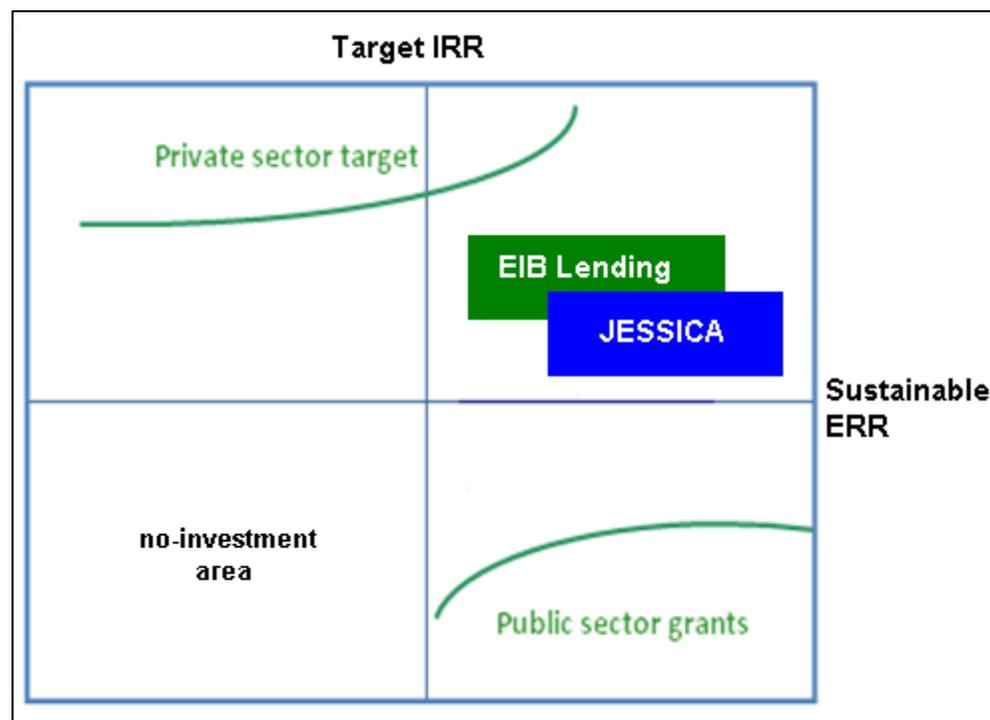
- “Place making” locations / incubators / creative class attractors
- Brownfield locations, mostly in inner city areas
- Deprived city districts, urban sprawl voids

- **City infrastructure transformation funds (for city systems)**

- Addressing infra / urban imbalances from changes in city hierarchy
- Focusing on the provision of capital in less competitive areas
- Focusing on transformation of strategic urban infrastructure
- IT broadband, waste to energy, water, electric public transport, etc.

- **Energy-focused funds (regional or city-based)**

- EE / RE and energy / emission audit / certification systems
- Climate action strategies (EU 20/20/20 targets in urban areas)
- Regional upgrade of green technology and transmission systems



State of play of existing JESSICA mandates



EIB Holding Fund mandate		Implementation progress							
Managing Authority	Volume (EUR m)	HF FA	0	1	2	3	4	5	6
HF - Wielkopolska (PL)	67	II/09	■	■	■	■	■	■	■
HF - Andalucía (ES)	86	II/09	■	■	■	■	■	■	■
HF - Lithuania (LT)	227	II/09	■	■	■	■	■	■	■
HF - Portugal (PT)	130	III/09	■	■	■	■	■	■	■
HF - WestPomerania (PL)	33	III/09	■	■	■	■	■	■	■
HF - London (UK)	110	IV/09	■	■	■	■	■	■	■
HF - NorthWest England (UK)	110	IV/09	■	■	■	■	■	■	■
HF - Sicily (IT)	148	IV/09	■	■	■	■	■	■	■
HF - Moravia Silesia (CZ)	20	I/10	■	■	■	■	■	■	■
HF - Campania (IT)	100	I/10	■	■	■	■	■	■	■
HF - Scotland (UK)	55	II/10	■	■	■	■	■	■	■
HF - Greece (GR)	258	III/10	■	■	■	■	■	■	■
HF - Silesia (PL)	60	III/10	■	■	■	■	■	■	■
HF - Pomerania (PL)	57	III/10	■	■	■	■	■	■	■
HF - Bulgaria (BG)	33	III/10	■	■	■	■	■	■	■
Total signed 2010	1,494								
HF - Energy Efficiency (ES)	142	II/11	■	■	■	■	■	■	■
HF - Galicia (ES)	15	II/11	■	■	■	■	■	■	■
HF - Sardinia (IT)	60	II/11	■	■	■	■	■	■	■
HF - Masovia (PL)	40	II/11	■	■	■	■	■	■	■
HF - Abruzzo (IT)	25	III/11	■	■	■	■	■	■	■
HF - Czech National Fund (CZ)	40	III/11	■	■	■	■	■	■	■
HF - Hungary (HU)	50	III/11	■	■	■	■	■	■	■
HF - Slovakia (SK)	20	III/11	■	■	■	■	■	■	■
HF - North East (CZ)	20	IV/11	■	■	■	■	■	■	■
Total expected 2011	412								
Total 2010 + 2011	1,906								

Key implementation stages:	
0	Pre-negotiation Stage/ HF Agreement to be signed in 2010
1	HF Agreement signed/ Investment strategy/ Investment board
2	Call(s) for Expression of Interest in preparation
3	Call(s) for Expression of Interest launched
4	Call(s) for Expression of Interest closed
5	UDF(s) selected
6	Operational agreements in place (HF/ UDF)

Legend	
■	Stage Achieved
■	Implementation of the stage imminent
■	Signature expected in coming months

Global challenges in urban transformation

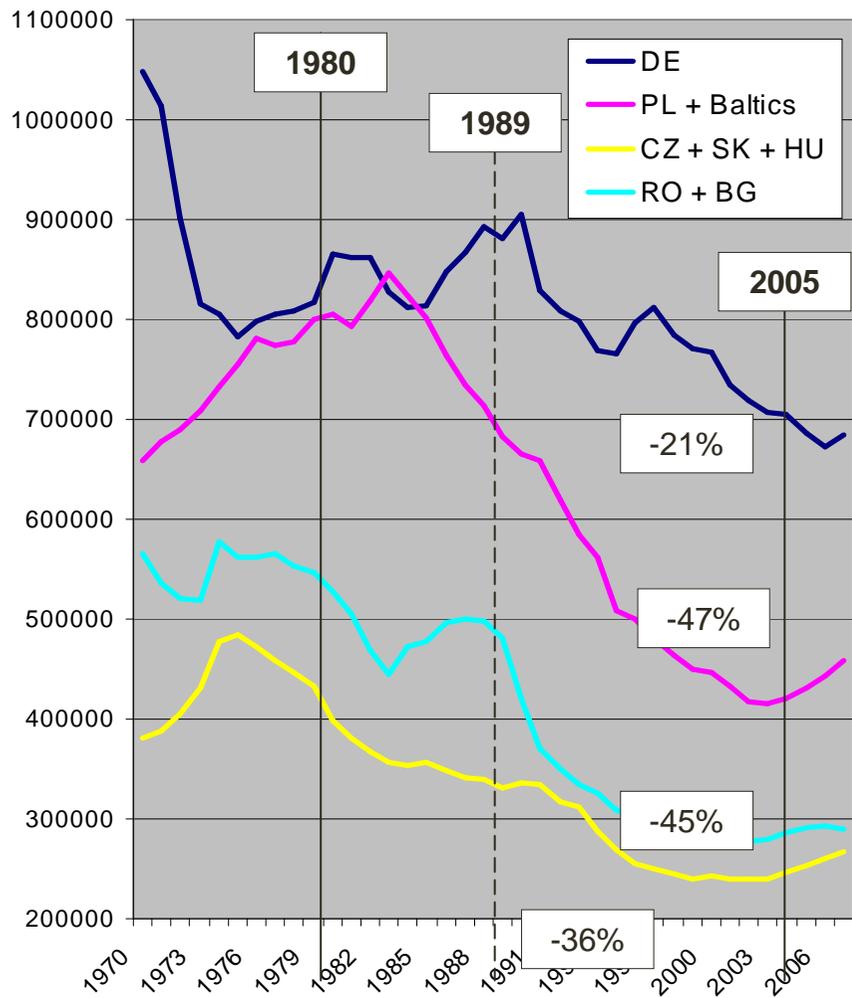


1. EU & globalization => “single market for cities” (1200 – 2000 functional urban areas compete for scarce resources: Human capital, Economic activity, Budgetary transfers, etc.)
2. MS and regions have partly lost their capacity to “govern” the transformation of the urban systems due to both market and institutional factors
3. New modes of interaction with the private sector to achieve public goals
4. National budget discipline (Maastricht, pressure on sovereign debt, lower transfers from national to local level, “rationing”, lower expenditure capacity of cities, investment without additional debt
5. De-leveraging of banking activity (financial markets offer less co-financing for investment activity)
6. Reversed negative real estate economic cycle (from overinvestment to under-investment)
7. Impact on viability of private investments (PPPs) in urban infrastructure and urban development
8. Reduced collateral value of land and buildings, particularly in non-core areas
9. Institutional investors reshuffling their sovereign and sub-sovereign portfolios
10. End of baby-boomers’ era => from asset accumulation to management of existing property and infrastructure

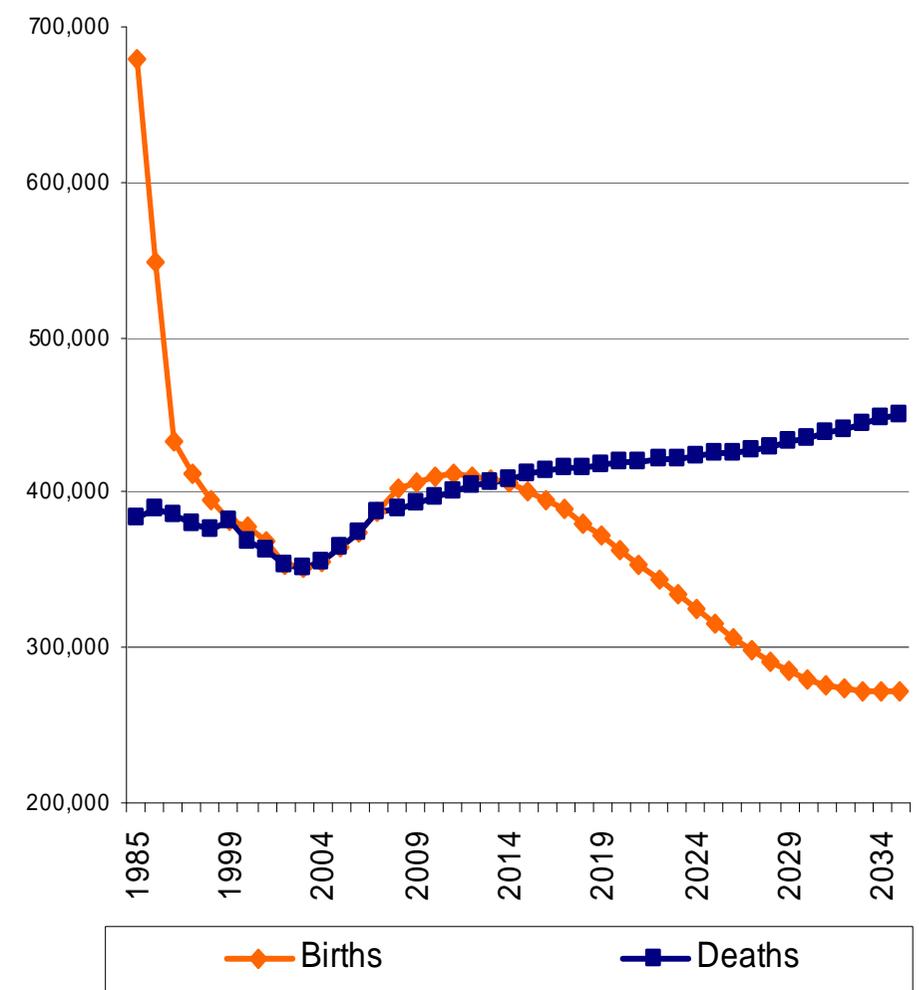
The Central EU demographic scenario



Livebirths in Germany and Central-Eastern Europe, 1970-2007



Births and Deaths in Poland 1985 - 2035



Increased levels of migration and mobility



Increased mobility

Youngsters → jobs

Elderly → quality for money

Women → opportunities

Cold → temperate

East → West

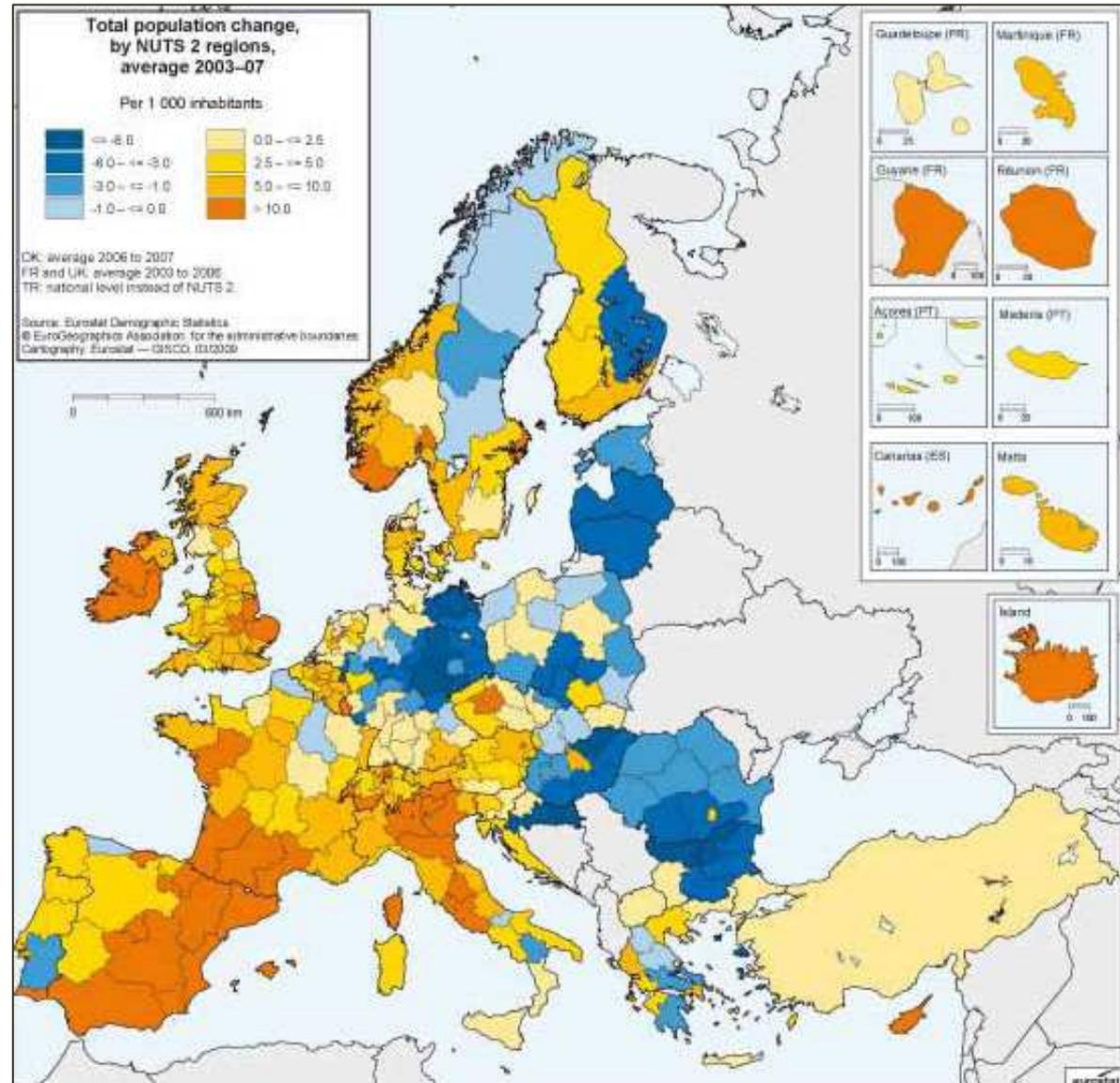
North → South

Inland → littoral

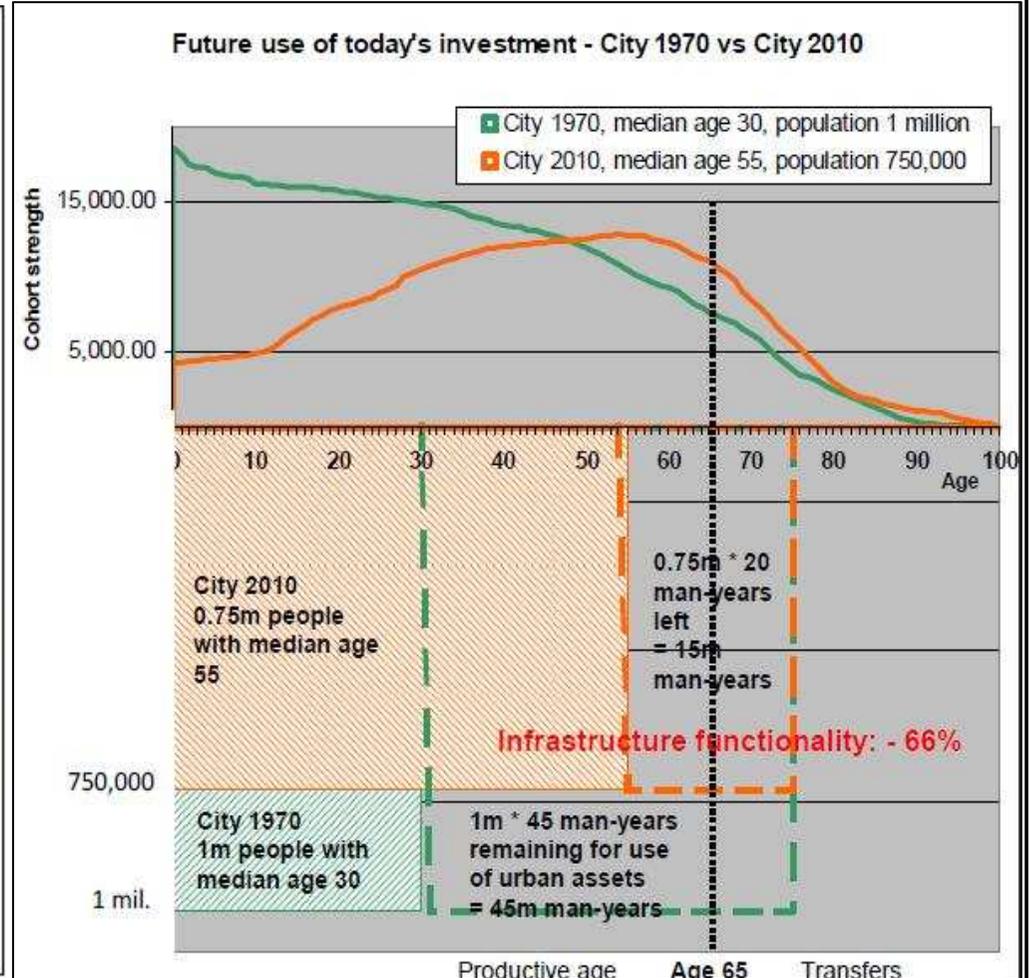
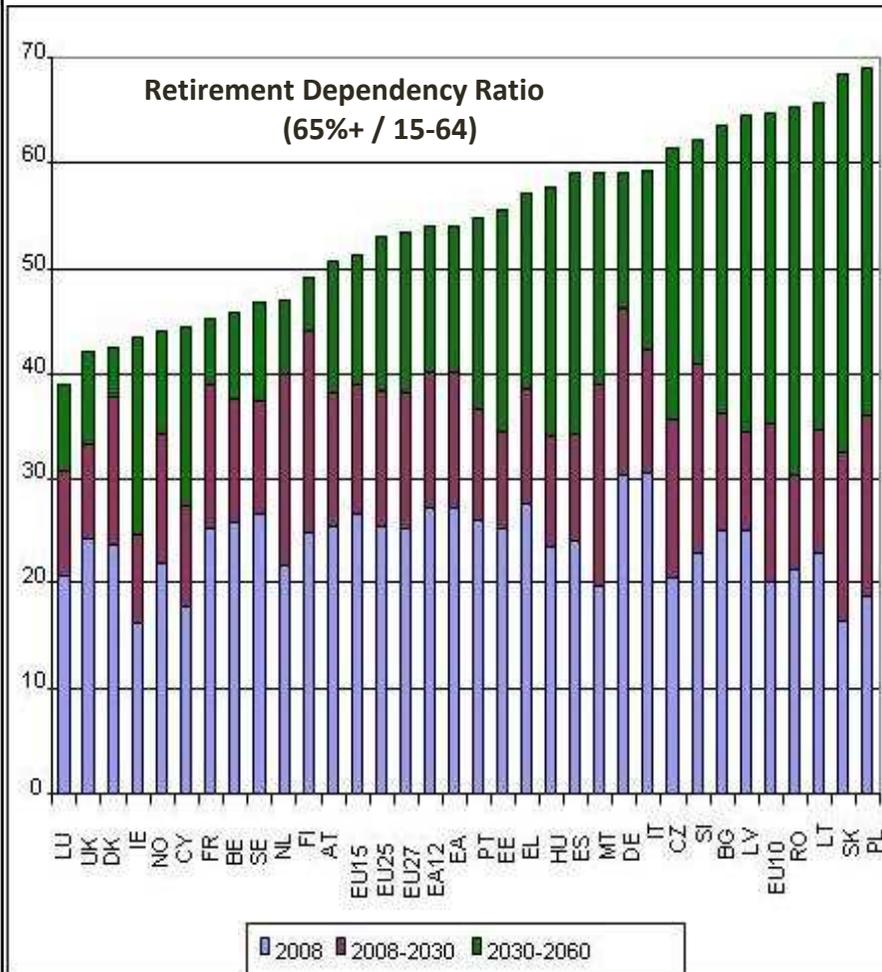
Countryside → urban poles

Centre ↔ sprawl

East DE: compacting



Demographic impacts on public finance and city infrastructure performance (1/2)



Demographic impacts on public finance and city infrastructure performance (2/2)

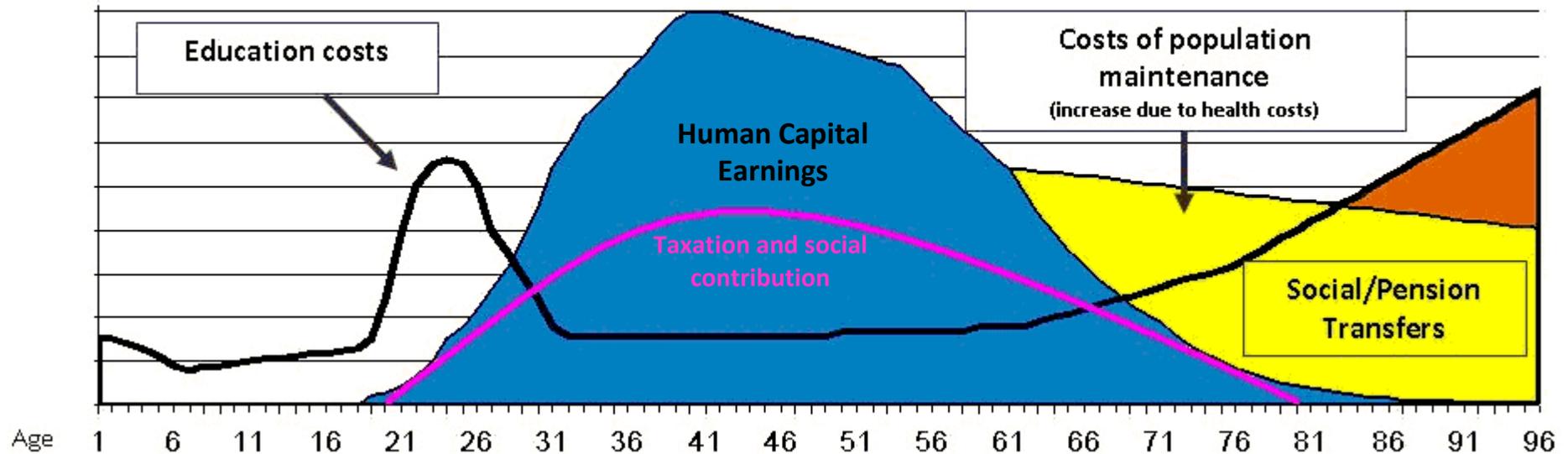


Ageing (increasing old-age dependency ratio)

- Impacts public budgets (lower GDP, higher pensions expenditure)

Productivity <i>Ratio</i>	Employment <i>Rate</i>	Age Structure <i>Indicator</i>	Demographic <i>Forecast</i>
$GDP = \frac{GDP}{Employees} \times \frac{Employees}{Active Population} \times \frac{Active Population}{Population} \times Population$			

HUMAN CAPITAL PRODUCTIVITY AND COST BY AGE STRUCTURE



Importance of Silesia for the Polish economy



While GDP and population of Silesia decreased relatively since 2000, productivity remains well above the average in Poland

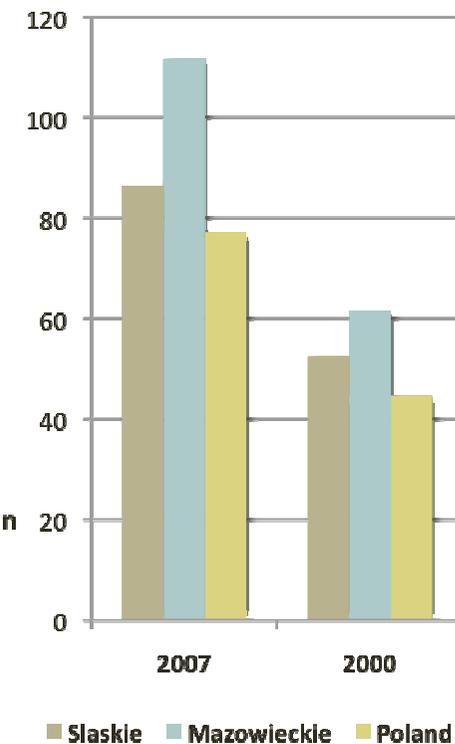
GDP 2000 in PLN



GDP 2007 in PLN



Productivity ratio (GDP per employee)



Population in 2000



Population in 2007

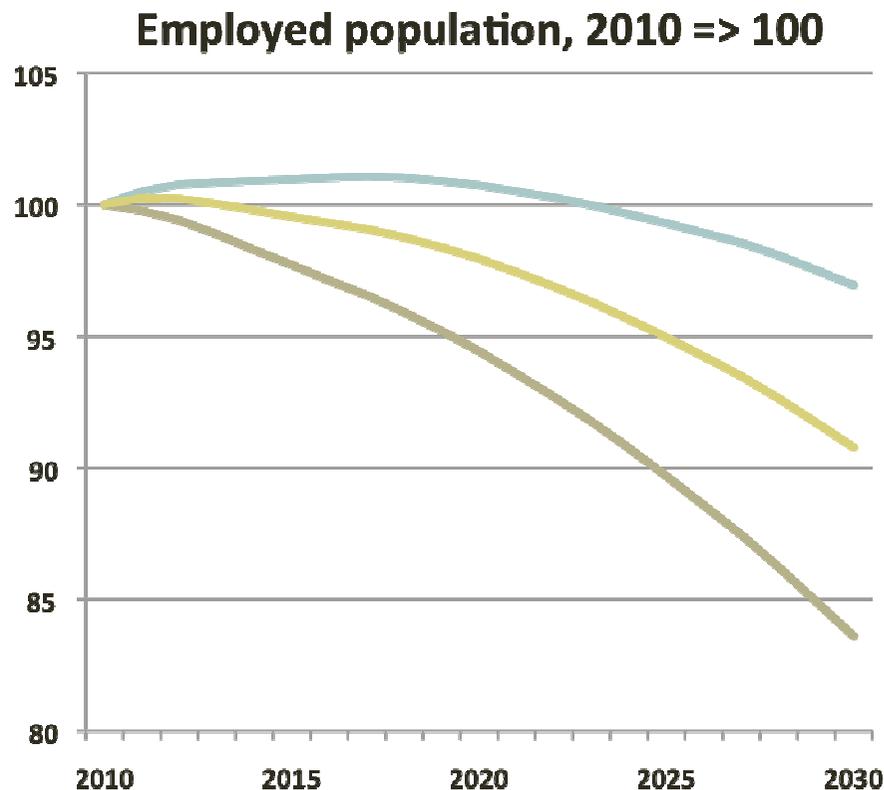
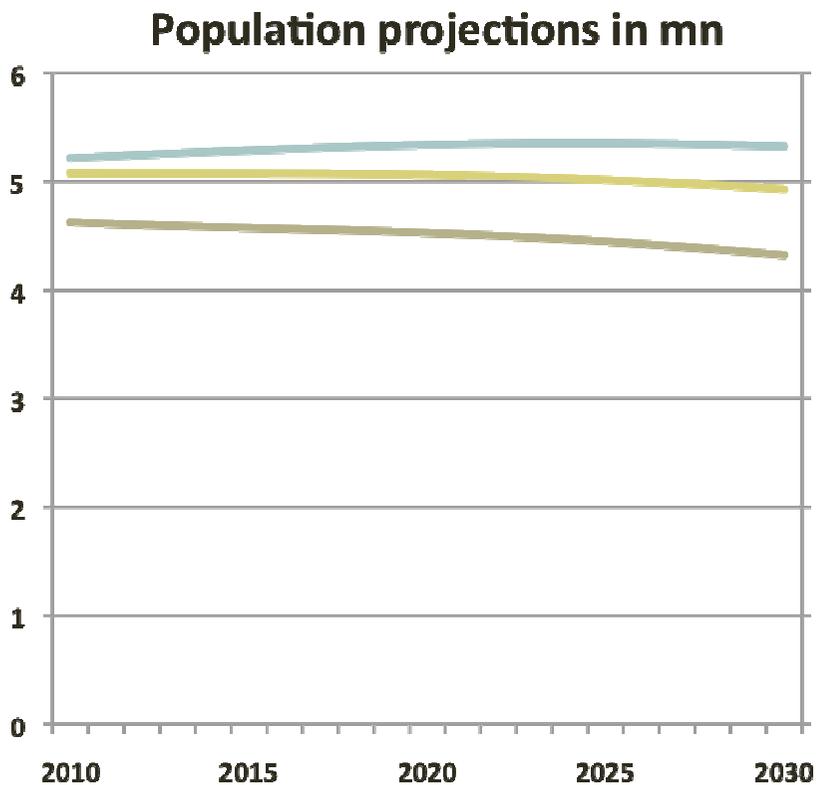


Source: Eurostat and JESSICA Team calculations

Population projections



In the next 20 years population will decrease in Poland as well as in Silesia, but the 16% decrease in employed population in Silesia is more than average



— Slaskie (left scale) — Mazowieckie (left scale) — Poland (right scale)

— Slaskie — Mazowieckie — Poland

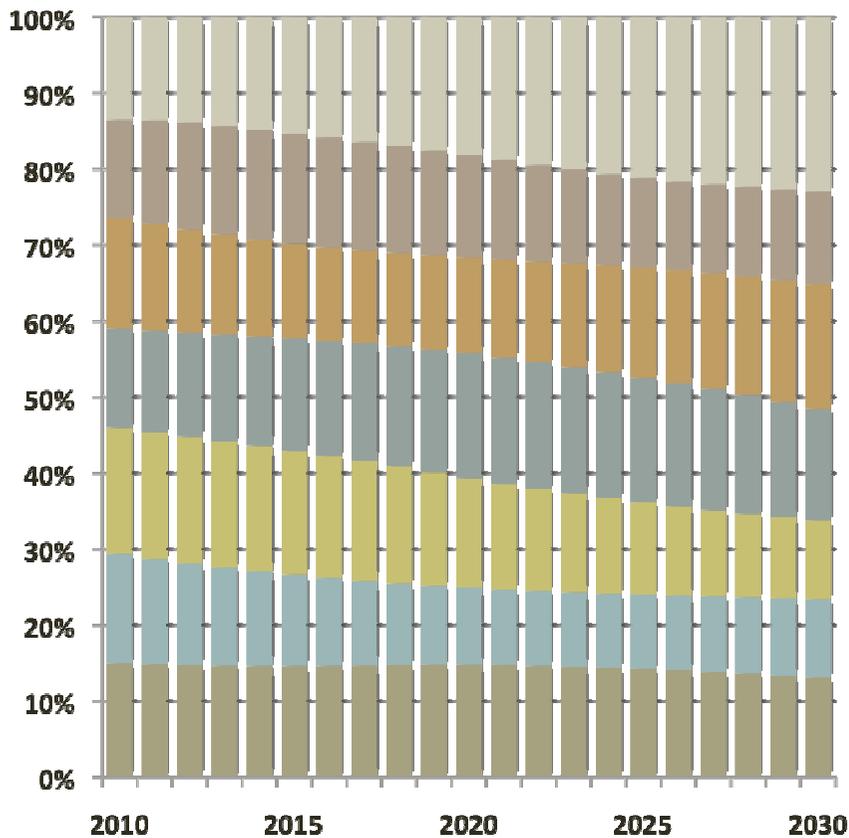
Source: Eurostat and JESSICA Team calculations

Population age structure projections

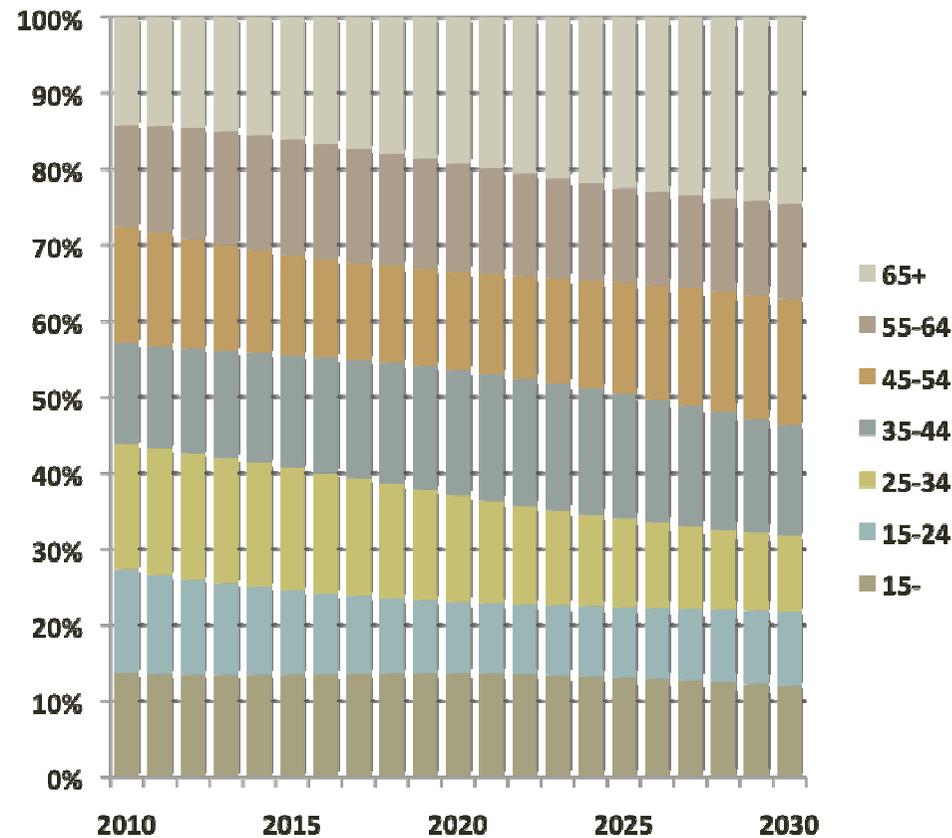


**Population is ageing in Poland, also in Silesia:
In 2030 about 25% of the population in Silesia will be over 65**

Age distribution in Poland



Age distribution in Silesia



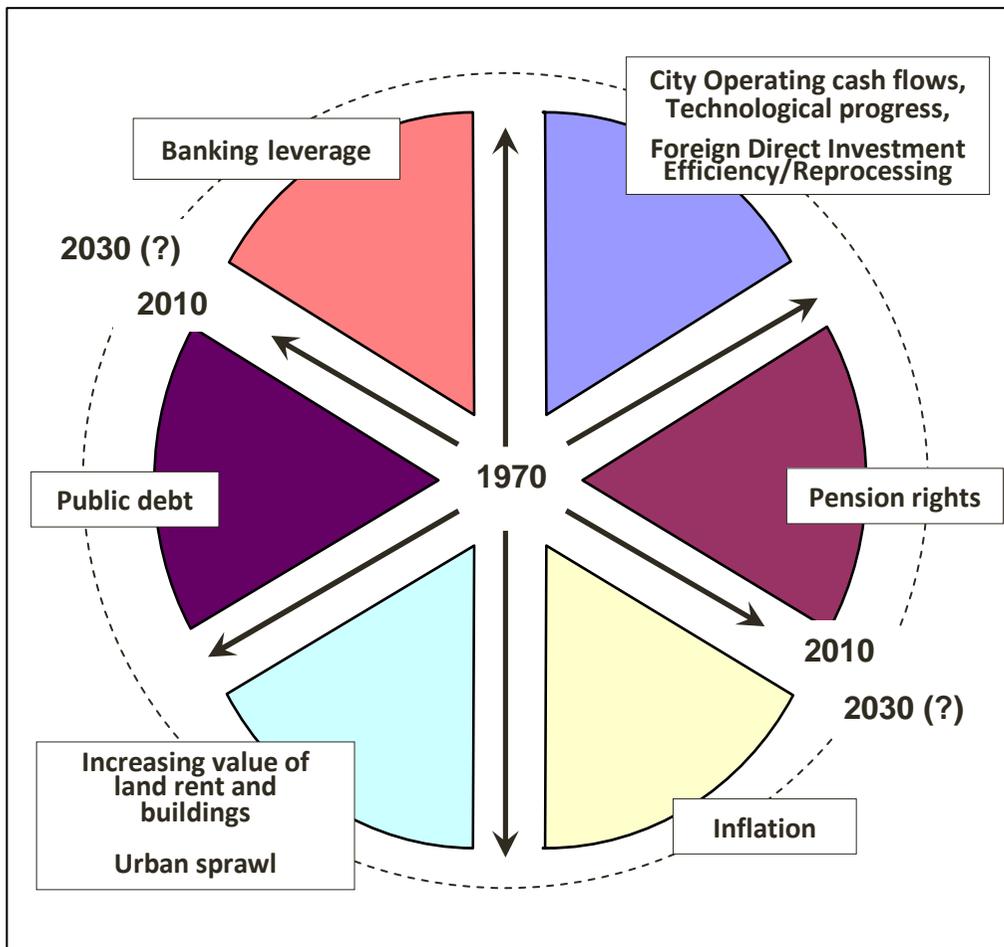
Source: Eurostat and JESSICA Team calculations

Raising “financial resources” for cities



What drove growth in 1970-2010?

What will happen to these (largely financial) drivers in 2010-2030?



Geography matters:

- Transform your city areas into growth poles
 - Focus on latent capital
 - Keep your cities “slow”/ “low cost” (maintenance, obsolescence)
 - Think new ways to finance inner city areas, housing stock refurbishment
 - Attraction from external sources is crucial (investment, capital,...)
- For all this, combine various sources of leverage
- Regions: SF
 - Cities: land & buildings
 - Banks: financial resources
 - Private: additional resources

Where/why banking sector has failed in the past...

In particular over the past 40 years:

- 1970s – Spanish crises
- 1973-1975 – Real Estate crisis in the UK
- 1980-1985 – Saving and Loans crisis in the US
- 1986-2004 – Japanese asset price bubble
- 1990s – Nordic banking crises
- 1997/1998 – Asian, South American and Russian financial crises
- 2007-2010 – Financial crisis including:
 - 2007 – Subprime mortgage crisis in the US
 - 2008 – UK bank rescue package
 - 2008/2009 – Icelandic financial crisis + Baltic Countries (Estonia, Latvia)
 - 2008 – Greek Financial Crisis (Athens)
 - 2008/2010 – Irish banking crisis
 - 2008/2009 – Spanish financial crisis
 - 20?? – Asian crisis

This brings us to question of whether urban areas are indeed productive and how to measure the overall productivity of the investment activity which has been carried out.

Global Real Estate Market vs. Stock Market



URBAN MARKET → Cities Market assimilated to a “stock market” due to “financial features” of real estate investment.

Main differences:

- NO Pre-emption rights
- No regulated information (exception: US market)
- NO Short selling potential – No Derivatives (exception Goldman Sachs/UK)
 - Long adjustments to external shocks, e.g. energy shock
 - High frictional unemployment
- Excess of properties returning to the market after 2007 shock
 - low interest rate environment from Central Banks
- Higher costs of Bankruptcies
 - lower recovery rate due to ageing/ demographics/ affordability problems in areas of high growth
- What's next?
→ INFLATION (?) → DUAL GROWTH (?)

Functional urban areas and metropolitan areas



Integrated urban investment strategy for highly dense functional areas

Holistic Approach ➔ **Urban wealth**
(Natural, Fixed, Human, Economic)

- ↳ Jobs & economic activity
- ↳ Financials / Fiscal
- ↳ Sustainability
- ↳ Capital & enterprise transfers
- ↳ Human capital ageing / migration
- ↳ Asset value creation processes

... focus on the **functional urban area** (Urban Labour Market Areas, ULMAs) and the role of European Metropolitan areas over the next 20 years



Functional urban area in the Silesia region, Poland

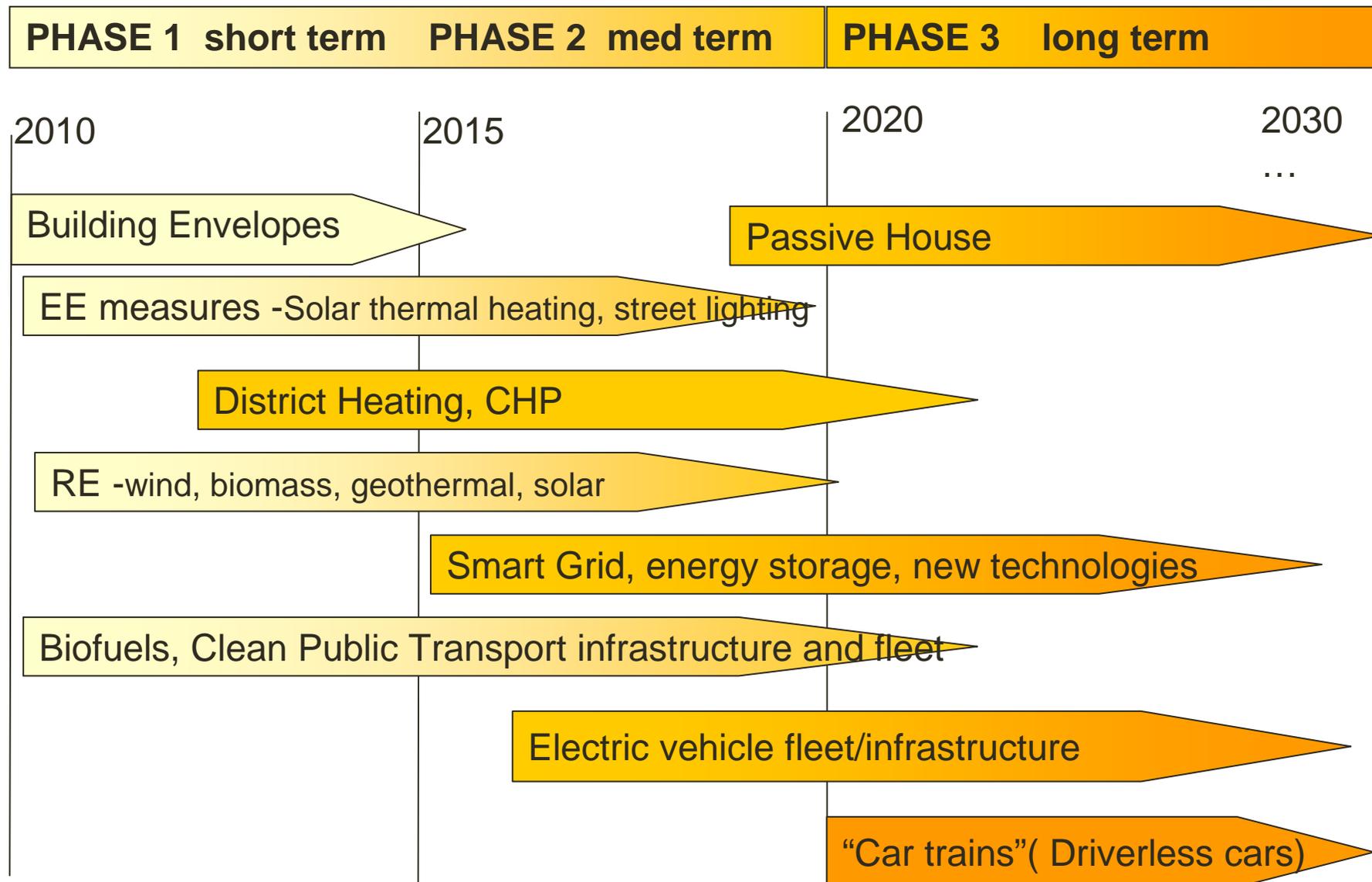
Assessment Model: Sustainable Urban Productivity

$$\text{(Capital) } K_U = \text{Debt} + \text{Equity} + \text{Risk} = K_N + K_F + K_{HC} + K_{EF}$$

Sustainable Value Creation in Urban Cycle Processes

Micro/Corporate	Macro	Function
Output	Total amount of services/goods produced by urban capital factors	Y +
Intermediate Consumption	Intermediate costs borne in the production cycle	C -
Value Added	GDP	VA =
Salaries	Remuneration of productive HC (necessary to reproduce human stock)	W -
EBITDA	Gross Cashflow for Investment	EBITDA =
Depreciation/Amortisation	Capital Depreciation (= ordinary investment necessary to integrate urban stock)	DA -
EBIT	EBIT	EBIT =
Sustainability Costs	Extraordinary Investment necessary to integrate urban stock to achieve sustainability targets	Sust. -
Sustainable EBIT	Net spendable Cashflow for remunerating Lenders, Capital and Public Sector	EBITs =
Financial costs (revenues)	Financial costs (revenues); Remuneration of Economic/Financial Capital	i - / +
Transfers	Taxes, Grants, Pensions, Remittances, Transfers of Capital, remuneration of improductive HC, etc.	T - / +
Value Creation	Goodwill and Value Capture processes connected to urban rent/externalities	V - / +
Free Cash flow for accumulation	Free Cash-flow available for future capital accumulation	ΔK =

UDF dynamic structure: Energy Urban Projects meet evolving needs



What makes regions grow? (OECD methodology)



Economic growth in urban areas is driven by:

endogenous factors

(such as human capital, physical capital (infrastructure) and innovation)

1. Human capital is the most robust factor and takes about three years to have an impact.
2. Infrastructure has an impact as long as other factors are also in place such as human capital and innovation.
3. Innovation has an impact on growth, but is a longer term process and takes between 5 to 10 years.

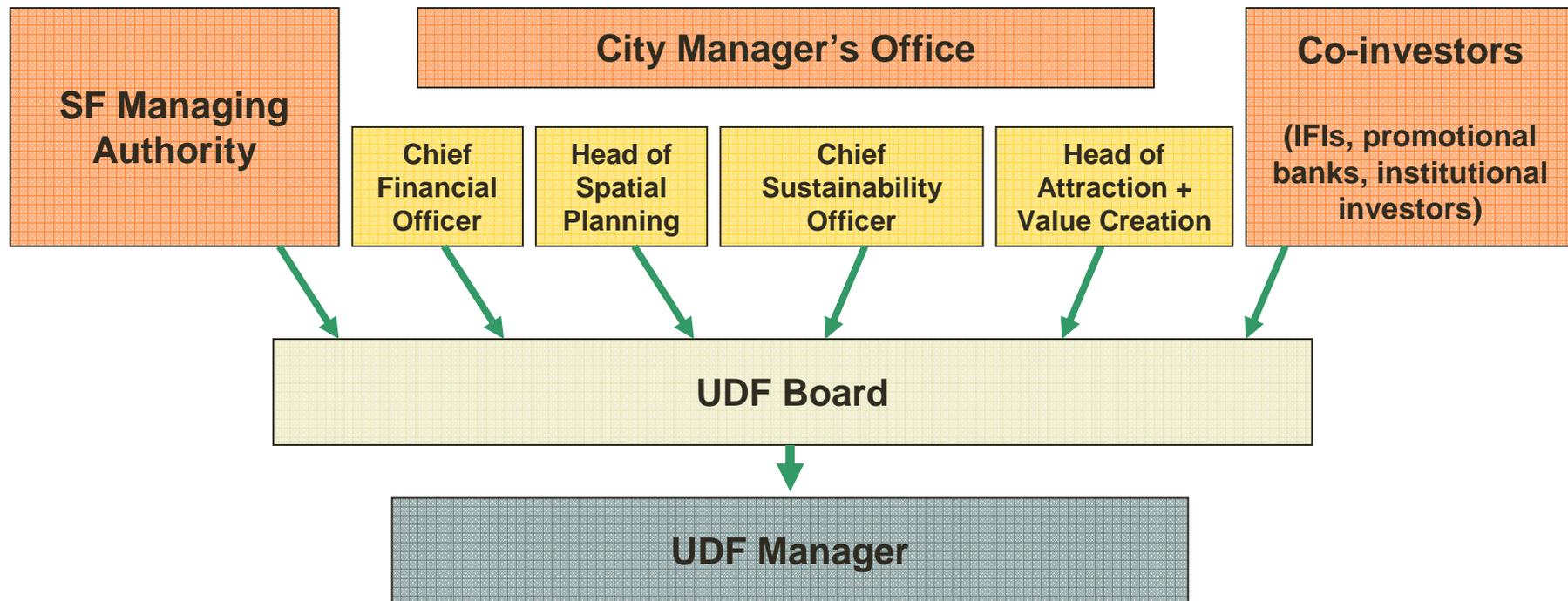
spatial factors

(such as agglomeration economies and proximity to markets)

1. Agglomerations in services has a positive impact on growth. This result can have particular implications for urban regions since financial intermediation (or knowledge-intensive services) is mainly present in metropolitan areas.
2. Accessibility to markets has a positive impact on growth, but this result is not very robust.
3. Urban regions with low employment rates can generate growth if they can manage to mobilise their labour force.

Source: OECD (2009) *How Regions Grow*, OECD, Paris.

UDF governance structure for impact investing



- UDF investments into revenue-generating urban projects should not be based on “cherry-picking” lucrative projects
 - Manage the externalities, ensure qualitative sustainability of projects
 - Positive economic returns for the city have to be “enforced” in project design and selection

Conclusions



Urban management in EU will be increasingly difficult, however, conditions for sustainable development can be created in local urban poles.

- The core element is to have *efficient, productive, attractive and livable* cities characterized by low maintenance/management costs and low “break-even point” on fixed assets
 - *Competitive cities in a shrinking/restructuring environment*
- Can be achieved by *rationalization, reprocessing, restructuring and optimization* at the urban level with a focus on sustainability
- Cities need clear objectives, strategic planning, a roadmap, governance, technical data and systems to tackle market distortions/ long-term risks - managed through **strategic impact investors**.

JESSICA Urban Development Funds as strategic impact investors

- Policy-driven financial instruments
 - Enabling to address LOCAL implications of GLOBAL problems through a LOCAL integrated strategy for urban investment;
 - Reconciling a bottom-up approach with a global vision.
- Bundesbank study of post-reunification transfers:
 - Geographically neutral policies are not conducive to economic growth
- **A strategy cannot be implemented without a financial instrument - but a financial instrument is meaningless without an adequate and focused strategy for value creation in cities.**



JESSICA and Investment Funds

European Investment Bank

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www.eib.org/jessica