

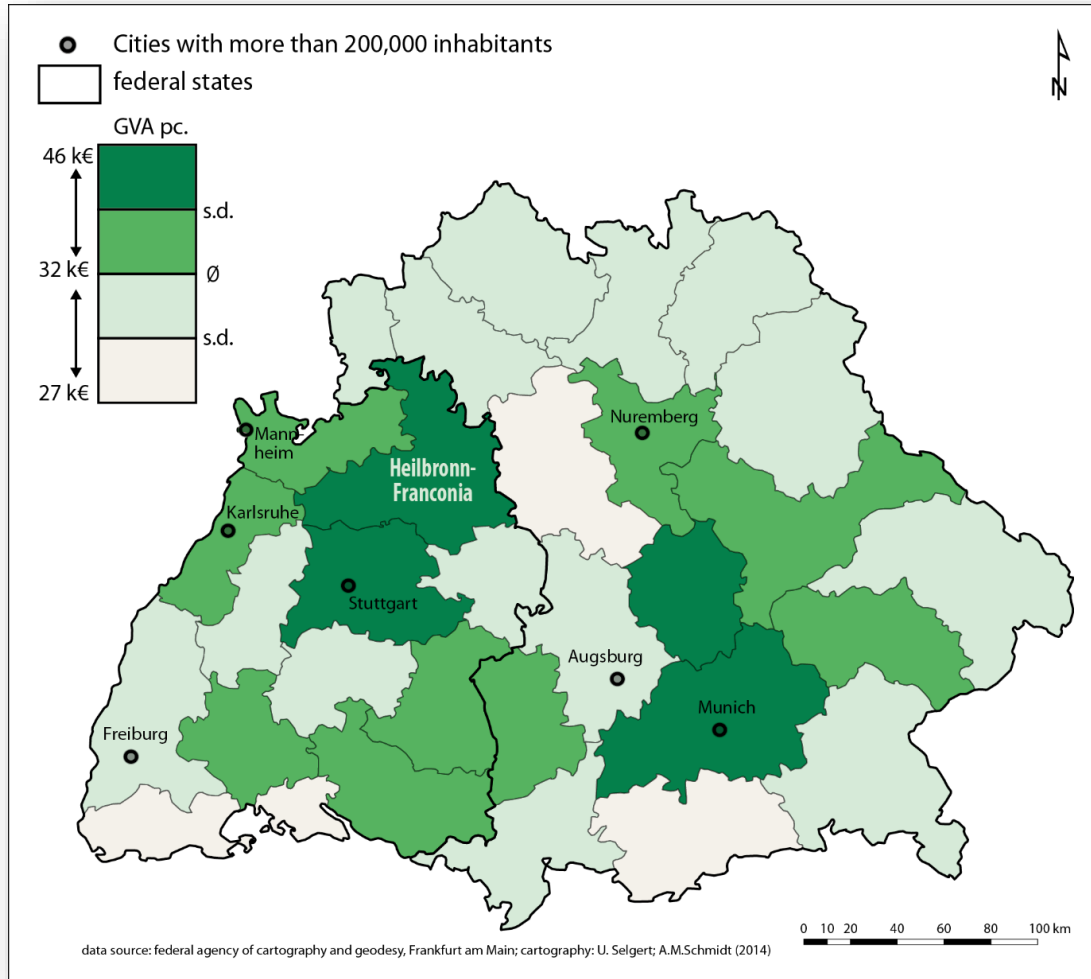


Growing Against Conventional Wisdom: Entrepreneurship and Economic Prosperity in Heilbronn-Franconia



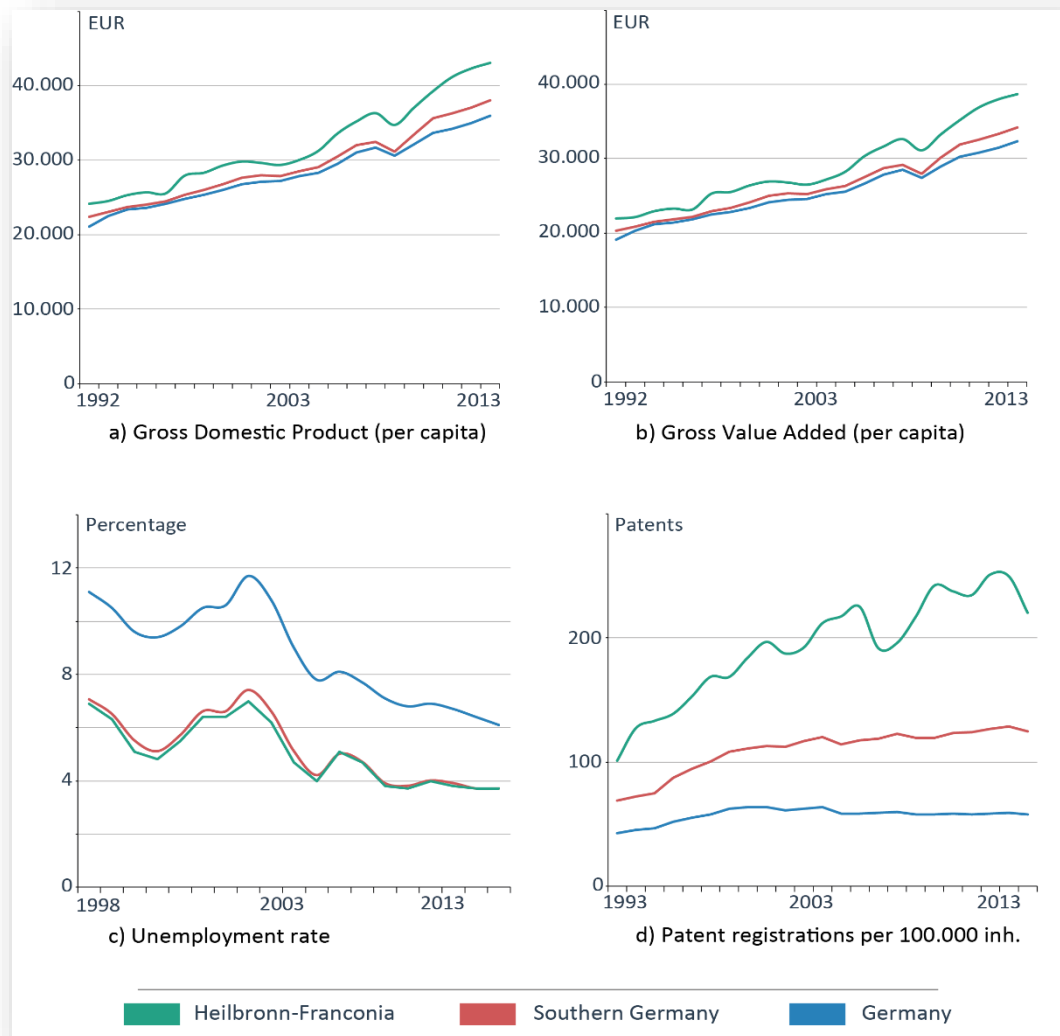
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Baden-Württemberg's Northeast: Heilbronn-Franconia



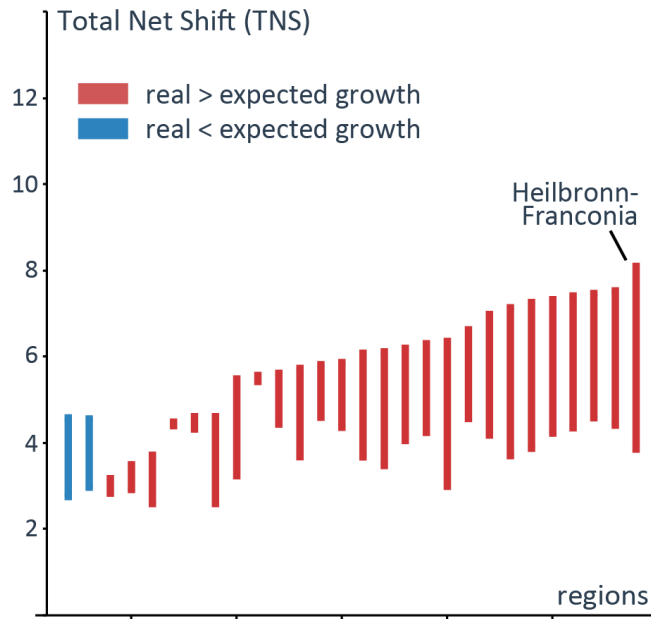
- With a GDP of over 500b EUR, Baden-Württemberg would be No. 22 in a world ranking of global economies, similar in size to Sweden or Poland.
- Heilbronn-Franconia is a planning region located between metropolitan regions of Rhine-Neckar, Stuttgart, Nuremberg, and Frankfurt.
- It is the region with the second fastest economic growth in Germany since 2000.

Heilbronn-Franconia: A prosperous region

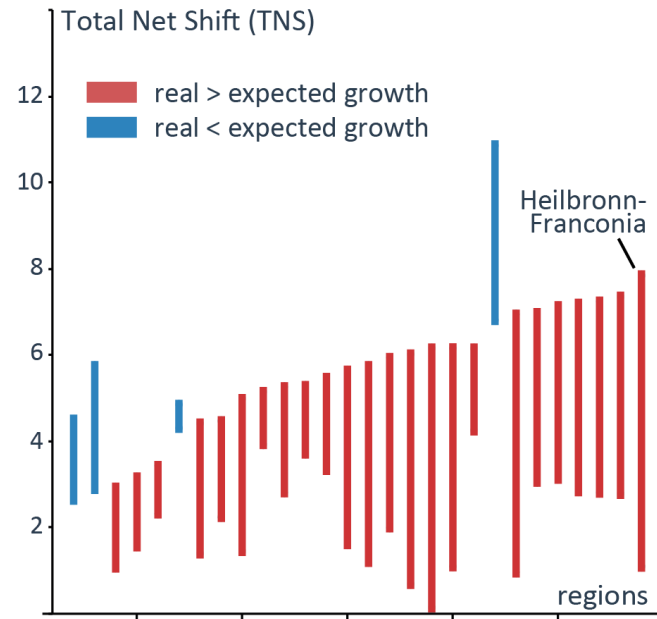


- It is the fourth most prosperous region in Southern Germany (after Munich, Stuttgart, Ingolstadt) in terms of GVA per capita.
- The region is amongst the most developed since world war II with above average growth rates over the last 25 years (since German unification in 1992).
- ...with the lowest rates of unemployment and unionization.
- ...and it is a leader in technical innovativeness.

Inconsistency with growth theory: industry structure

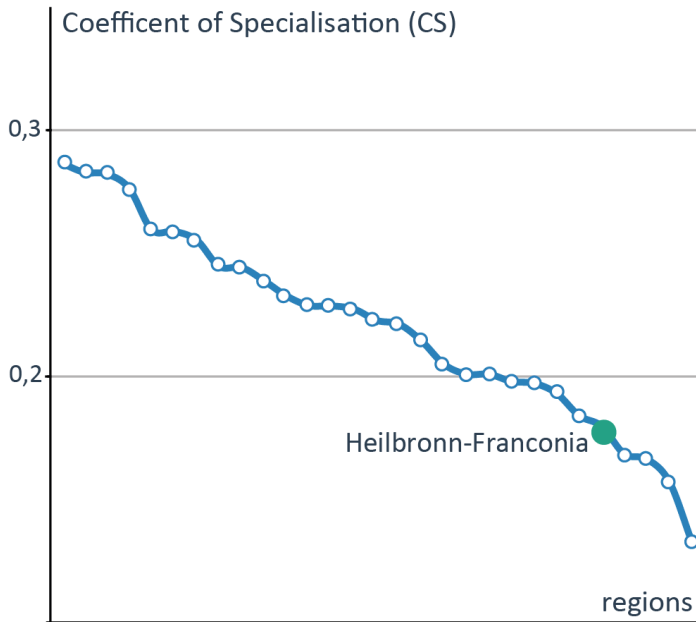


a) Shift-share effects based on sectoral composition of the labor market

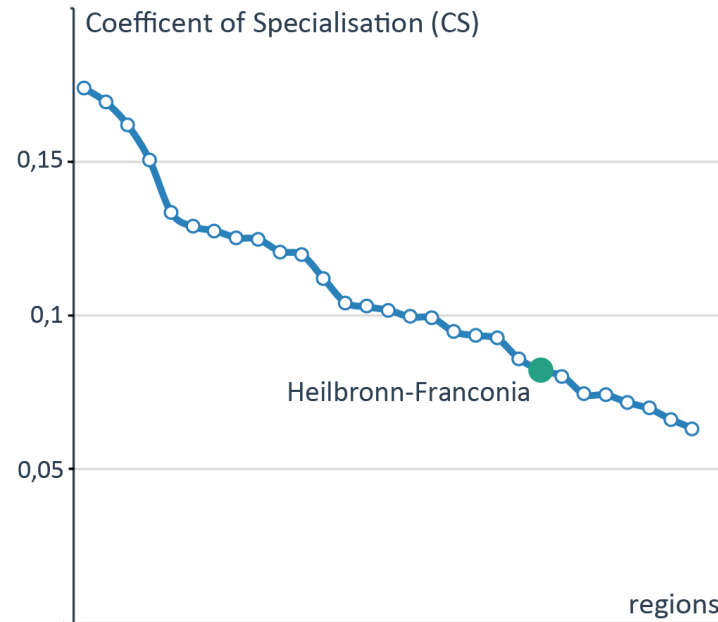


b) Shift-share effects based on occupational composition of the labor market

Inconsistency with growth theory: Clustering?

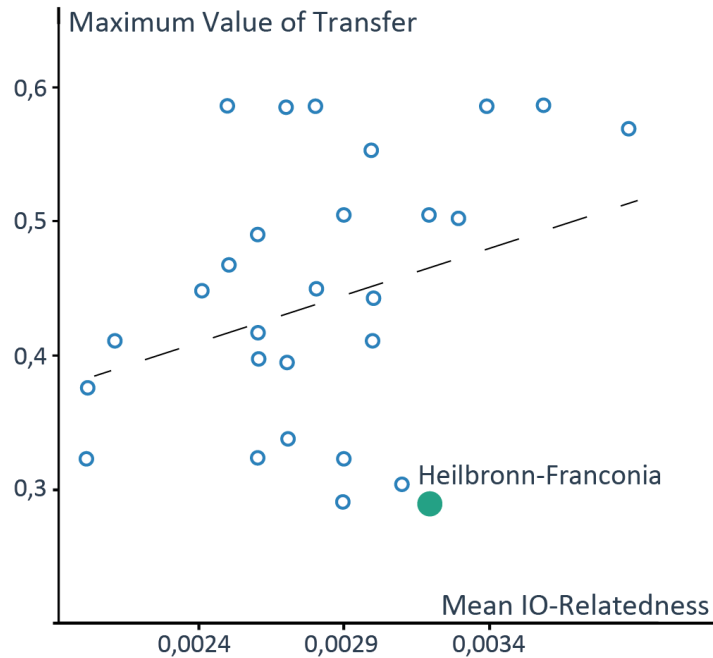


c) Coefficient of regional specialization on sectors

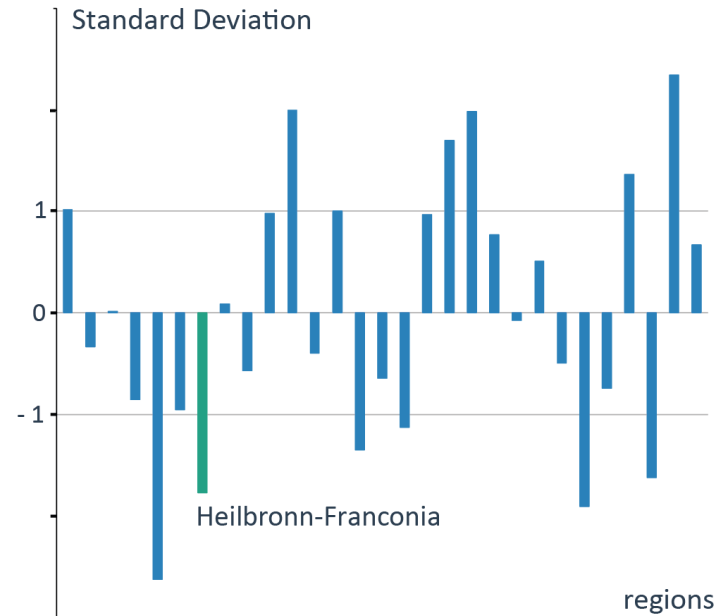


d) Coefficient of regional specialization on occupation

Inconsistency with growth theory: related variety?



e) Commodity-flow based relatedness of sectors



f) Occupational relatedness of sectors



No statistical association with GVA per capita

Independent variables	<i>R</i>	<i>S.E.</i>	<i>p</i>	<i>R</i> ²
<i>Shift-Share (2007-2011)</i>				
Sectoral shift: expected employment growth	.313	4.709	.098	.098
Functional shift: expected employment growth	.418*	4.505	.024	.174
<i>Specialization (Coeff. of specializ., 2007)</i>				
Sectoral specialization	-.113	4.926	.559	.013
Occupational specialization	.083	4.941	.669	.007
<i>Relatedness (2007)</i>				
Commodity-flow based relatedness of sectors	.491*	4.318	.007	.242
Skill-relatedness of sectors	-.356	4.633	.058	.127
<i>Control variables</i>				
employment growth (1999-2013, in percent)	.644***	3.794	.000	.415
Population	.605**	3.949	.001	.365

Associations between measures of industrial and occupational structure on GVA per capita for 29 planning regions in Southern Germany (2011, bivariate OLS regressions)

- Statistical tests for the effects of mainstream regional science models on regional production do not account for growth in Southern Germany.
- While industry relatedness is slightly significant, it was amongst the weakest in Heilbronn-Franconia.
- And while skill-relatedness is insignificant in Southern Germany, it was high in Heilbronn.

Alternative: Understanding the institutional context



Elements	Description	Example
Regulation	The set of legally actionable rules and regulations, which affects the modus operandi of economic development in a geographical setting.	Legislation on regional governance structure, e.g. level of decentralization of power and resources; regulations on land use and regional and urban planning; administrative law
Institutional actors	Individuals and organizations that affect the economy in a geographical setting.	Local and regional authorities, business firms, business associations, unions, NGOs, universities, colleges, trusts and foundations, etc.
Institutions	Interaction orders based on legitimate mutual expectations, which can be based on formal rules as well as informal norms.	Stable forms of cooperation, e.g. among and between local authorities, private business, research and education, and civil society sector

Glückler J, Bathelt H (2017) Institutional context and innovation. In: Bathelt H, Cohendet P, Henn S, Simon L (eds) *The Elgar Companion to Innovation and Knowledge Creation: A Multi-Disciplinary Approach*. Vol. Cheltenham: Edward Elgar, pp. 121-137; Martin R (2000) Institutional approaches in economic geography. In: Sheppard E, Barnes T (eds) *A Companion to Economic Geography*. Vol. Oxford, UK: Blackwell, pp. 77-94; Pike A, Marlow D, McCarthy A, O'Brien P, Tomaney J (2015) Local institutions and local economic development: the Local Enterprise Partnerships in England, 2010-. *Cambridge Journal of Regions, Economy and Society* 8 (2): 185-204.; Gertler MS (2010) Rules of the game: The place of institutions in regional economic change. *Regional Studies* 44: 1-15.

Scales of institutions in Heilbronn-Franconia

Interactions	Institutions	Effects on entrepreneurship
Intra-firm bonding	<ul style="list-style-type: none"> • <i>Mutual obligation</i> between employer and employees: Life-long engagement (long job tenure, low turnover rates), trustful employment relations (low levels of unionization), paternalistic relations (trust and social security) • <i>Tinkering</i>. Passionate search for improvement, irrespective of formal tasks and working hours 	<ul style="list-style-type: none"> • Continuous, incremental innovation • entrepreneurial stamina
Inter-firm insularity	<p><i>Doing (it alone)</i></p> <ul style="list-style-type: none"> • <i>Doing (rather than drafting)</i>: emphasis on technical skills rather than theory; no use of external services • <i>Doing (rather than doubting)</i>: trial-error-processes rather than pondering risks and costs • <i>Doing (rather than having things done)</i>: Swabian belief in autonomous problem-solving 	<ul style="list-style-type: none"> • Proprietary, hard-to-imitate knowledge • Frequent spinoffs
Regional cohesion	<ul style="list-style-type: none"> • <i>Informal networking</i>. anti-poaching, service on boards of civic and political organizations, leadership networks • <i>Social capital</i>. Patronage, philanthropy, and associational life 	<ul style="list-style-type: none"> • Belief in self-fulfillment • Community support • Critical mass of entrepreneurial role models

Conclusion



- Standard explanations of regional innovation transitions and long-term growth are incomplete and sometimes wrong.
- Regional trajectories require contextual explanations. Changes in trajectories often build on the specific institutional fabric in a region.
- Institutions refer to stable patterns of interaction that are often place-dependent. They may or may not be congruent with formal regulations and policies.
- Baden-Württemberg (here: Heilbronn-Franconia) has institutions that include stable patterns of doing and tinkering, of improvement innovation and technical precision, and of 'going-alone' rather than working together across firms.
- All these internalized institutions have supported entrepreneurial stamina and the growth toward niche leadership.



- Institutions are always underpinned by networks of persons.
 - “Networks can range from small-scale and interpersonal to large-scale and anonymous. Networks are a key observable dimension of institutions, though institutions are not reducible to their networks.”
- The relational infrastructure includes four institutional dimensions:
 1. **Across-network connections** bridge the boundaries between co-existing technologies and sectors.
 2. **Organizational sites** serve as interfaces that facilitate the mixing of these networks.
 3. **Informal networks** serve as ‘invisible colleges’ and enable timely cross-fertilization between technologists, researchers, entrepreneurs, and investors.
 4. **Elite leadership networks** are key in bridging divides between leaders in private business sectors, public authorities and civil society.