Regional and local dynamics of the automotive industry in Poland: determinants and prospects

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The background: the expansion of the automotive sector in Central Europe since 1990
The dynamics of automotive production 2004-2013

Passenger car production (in thousands)

- Germany
- France
- Spain
- United Kingdom
- Italy
- Germany
- France
- Spain
- United Kingdom
- Italy
- Czechia
- Poland
- Slovakia
- Romania
- Hungary

Source: ACEA/OICA
The dynamics of automotive exports 1999-2013

Automotive foreign trade balance

Source: Eurostat, Polish Statistical Office

Source: Eurostat, Polish Statistical Office
Exports > imports
2007: 4.2 billion euro
2011: 7.9 billion euro
2013: 7.9 billion euro

Source: Eurostat, Polish Statistical Office
Aims

1. To what extent has the dynamic growth of the automotive sector changed the geographical distribution of production?

2. What are the factors behind the regional and local changes?
Agenda

1. Regional stability or change?
2. Disinvestment and delocalization
3. Foreign greenfield investment
4. Local clusters: industrial towns
5. Conclusion
Shift-share in total manufacturing employment 1998-2012

Source: Polish Statistical Office
Employment in automotive industry 1998

Warsaw as a traditional core of the sector

Upper Silesia & Bielsko-Biała from the 1970s

south-eastern Poland: military-oriented industry since 1930s

Total employment: 146,000
Employment in automotive industry 2012

Śląskie region as the core of the sector (Upper Silesia & Bielsko-Biała & Częstochowa)

Lower Silesia (Wrocław region)

Wielkopolska (Poznań region)

Total employment: 210,000
Shift-share in automotive industry employment 1998-2012

Radical shift from Warsaw and south-east to the west especially south-west

NUTS-2 regions (voivodeships)
Shift-share in automotive industry employment 1998-2012

Radical shift from Warsaw and south-east to the west especially south-west
Bankruptcies, disinvestment and delocalisation

1998-2012
approximately 51,000 jobs lost
including 8,000 due to delocalisation

93,000 new jobs created
in greenfield plants at the same time
New plants in the automotive sector 1989-1998
New plants in the automotive sector 2007-2013
301 greenfield automotive plants built in Poland

South-western Poland
+ Upper Silesia
+ Lower Silesia

Western Poland
+ Poznań region
+ German borderland

Some investment in south-eastern Poland

Very little investment in the Warsaw region
Reinvestment and industrial upgrading in many plants

New investors often locate in the towns which were chosen earlier by other firms

+ proximity to Germany and Czechia
+ motorway A4 as the first road connection with Western Europe
+ towns and regions with industrial traditions (skills)
+ advantages of special economic zones (infrastructure and tax exemptions)
The case study: Faurecia

**FAURECIA:** 7th World largest OEM parts supplier (2012)
320 plants in 34 countries and 30 research and development centers with 94,000 employees
total revenues of 17,4 bln EUR

**FAURECIA IN POLAND:** 11 plants in 5 towns, R&D and SSCenter
representing four Faurecia’s business groups: Automotive Seating,
Employment: 5,300 (18% of Faurecia’s European employment)
The case study: Faurecia

Launch of operations: ‘follow-customer’ rather than a cost-cutting strategy. The first site in 1998: Grójec near Warsaw, production of seats frames, proximity to the capital city and Daewoo assembly plant (potential customer), availability of local technical skills

Expansion in 2001-2006 in W and SW Poland: Gorzów, Legnica, Wałbrzych, good road accessibility and proximity to main customers in Western Europe, availability of labour, including technicians, also tax exemptions in SEZ

Continuous production upgrading and some non-production functions: R&D and Financial Shared Service Center in Grójec

Substantial reinvestment 2012-2013: 2\textsuperscript{nd} plant in Gorzów, 2\textsuperscript{nd} plant in Legnica. Expansion of four Wałbrzych plants is under way R&D centre also expanded in 2012 (+50 engineers)
Industrial towns: the case of Bielsko-Biała

19th century: textile centre

20th century: textile machinery

1966: fire-engine produced in BB adopted for Syrena

1972: relocation of Syrena assembly from Warsaw to BB

1973: engine production and exports for Fiat 126

1992: acquisition by Fiat

2000: termination of Fiat 126 assembly; expansion of engine production

Now: 20 plants (9,550 employees) e.g. Eaton, TRW, Magneti Marelli and Polish R&D
Industrial towns: the case of Bielsko-Biała

evolutionary development based on earlier capabilities in machinery and metal manufacturing

follow-up investment of the suppliers of engine parts

non-production functions and local engineering firms
Industrial towns: the case of Gliwice

1796: iron works

19th century: diversified industrial centre in the western part of Upper Silesia

prior to 1945: headquarters of major industrial companies in German Upper Silesia and strong service sector

1945: large technical university and state-owned R&D centres

1996: GM decision on new assembly plant in Gliwice

Now: 14 plants (8,480 employees) e.g. GM, TRW, Nexteer, Delphi, NGK, Tenneco and R&D of some component producers
Industrial towns: the case of Gliwice

- no automotive tradition
- path-breaking GM decision
- strong competences in machinery and metal industries
- attitude and activity of local government
- special economic zone
- accessibility (A4 motorway)

imitation locational behaviour of export-oriented suppliers
Industrial towns: the case of Wałbrzych

Location in the Sudeten Mts.

19th century: coal mining and coke production; textile industry in the region

Environmental disaster

The closure of coal mines and textile factories; high unemployment

1998: first greenfield plants of labour-intensive components

1999: Toyota gear-box plant; engine factory later

Now: 12 plants (5,900 employees) e.g. Faurecia, NSK, Mando; no non-production competences
Industrial towns: the case of Wałbrzych

- no automotive tradition
- path-breaking Toyota decision
- large pool of relatively cheap labour
- general industrial traditions
- special economic zone
- good accessibility to Germany and Czechia
- typical export platform with no non-production functions and lack of domestic firms
Conclusion

The time of dynamic growth of automotive industry in the post-socialist era was a period of a major shift in the geographical distribution of production.

The radical change in the geography of automotive industry stemmed from:

a) massive greenfield investment in south-western and western regions
b) the bankruptcy of former state-owned monopolistic manufacturers of buses and heavy vehicles and some foreign investors, esp. Daewoo

The old Upper Silesian Industrial Region together with neighbouring Bielsko-Biała, Częstochowa & Kraków regions have developed as the core of the automotive sector in the country with two car plants, diversified supplier base and relatively strong non-production functions including R&D.
Conclusion

The formation of the core automotive region can be seen as a path-dependent process, the seeds of which were sown by locational decisions related to the Fiat-licensed car in the 1970s; the location of General Motors in 1996 triggered a massive foreign investment in the region.

Lower Silesia (Wroclaw – Legnica region) is a major winner of the expansion of automotive component sector in the corridor of A4 motorway in proximity to Germany and Czechia.

Good accessibility, industrial traditions (skills), infrastructure and special economic zone incentives are important factors behind the location of the majority of new plants in south-western Poland.

There is clear imitation behaviour in locational choices of foreign investors.

The future prospects of industrial towns dependent on automotive industry will be shaped by:

a) the general trends in the West European core as the main market
b) diversification of the local industry

c) specialization in less/more advanced products and services.
Thank you for your attention