

## Synergy of EU and National Economic Innovation Promotion in Saxony and Its Impacts on SME

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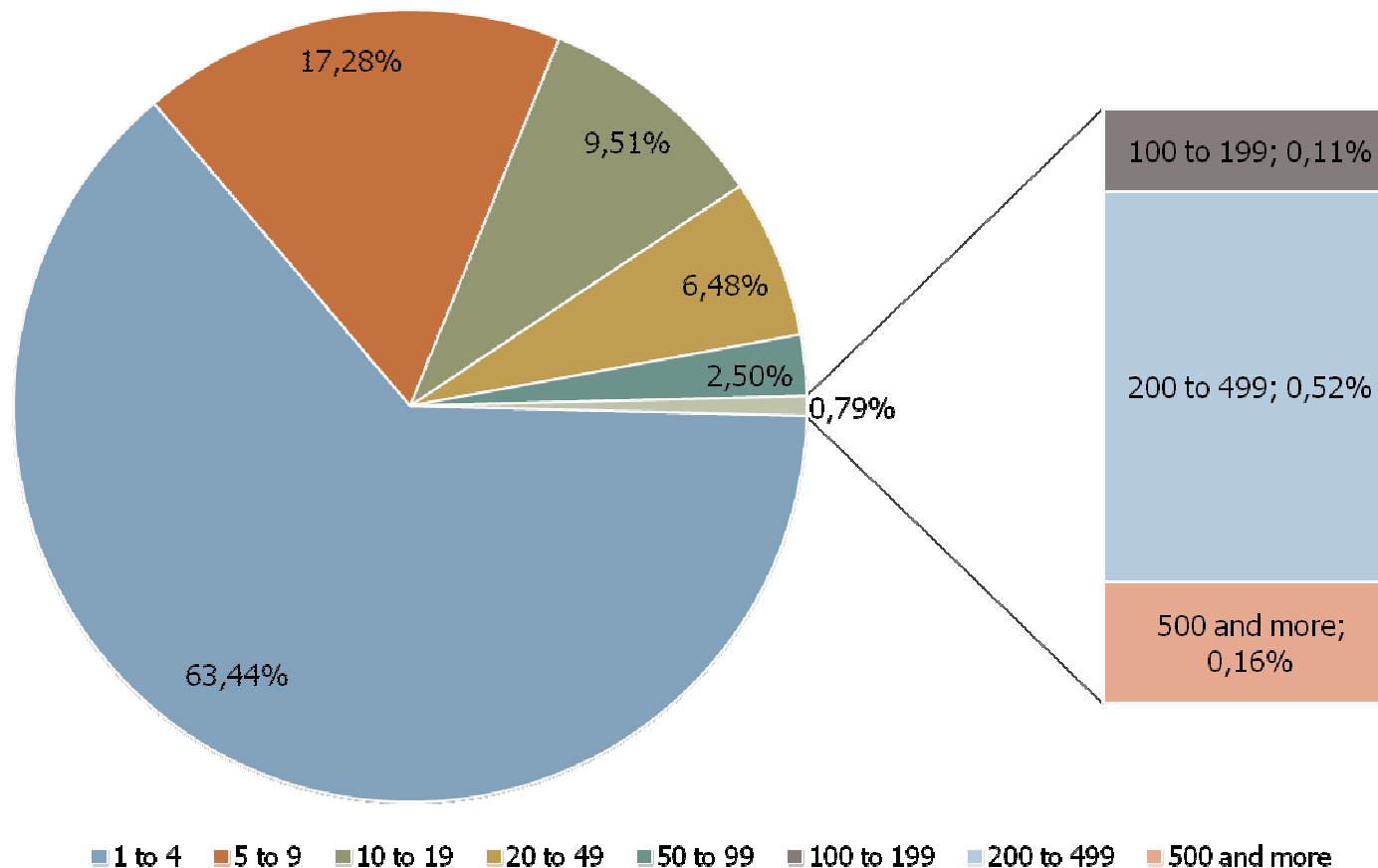


## Content

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1. Innovation Policy for East Germany: General Overview
2. EU Funded Innovation promotion in Saxony and its impacts on SMEs
3. Results and Conclusion

## Enterprise sizes by employees\* and number of employees in Saxony per June 30, 2007



\*insurable employments.

Source: Bundesagentur für Arbeit, Betriebsdatendatei 2007

## State's R&D expenditure and amount of ERDF-R&D Funds by Länder

Länder	2007			
	million euro	share of state's GDP in %	per capita	ERDF- R&D Funds in million euro
Baden-Württemberg	1,132	0.32	105	0
Bayern	1,346	0.31	108	0
Berlin	541	0.64	158	25
Brandenburg	180	0.34	71	0
Mecklenburg- W. P	137	0.39	82	25
Saxony	526	0.57	125	119
Saxony-Anhalt	227	0.44	94	34
Thuringia	226	0.47	99	15
<b>Germany/ average</b>	<b>8,037</b>	<b>0.33</b>	<b>98</b>	<b>218</b>

Source: Destatis 2010, BMBF 2009, GWK 2009

## Innovation Promotion for the East German Länder on National Level

1990: stabilising the downsizing R&D sector

- *R&D personnel programme (pay-roll costs)*
- *support programme for technology-oriented enterprise foundations*

mid-1990s: promotion of cooperation and regionally-oriented promotion

- *programme Innovative regional Growth Cores*
- *programme Centres for Innovation Competence*

from 2001: promotion of networking:

- *programme Networkingmanagement (pay-roll costs for managers)*

from 2007: cooperation between public research institutions and technology-intensive firms

- *programme for young R&D researches group*
- *programme for joint teams of technology-oriented and business oriented researchers*

### European Structural Funds support for Saxony - focus on innovation

1999-2006 total budget: 4.8 billion euro

ERDF: 3 billion euro

ESF: 1.1 billion euro

2007-2013 total budget: 4.12 billion euro **objective "Convergence"**

ERDF: 3.09 billion euro

ESF: 1.1 billion euro

priority axes of ERDF Operational Programme focused on innovation:

1. "Strengthening innovation, science and research" (35%)
2. "Advancement of education facilities and infrastructure" (8%)
3. "Promotion of the competitiveness of the industrial economy" (19%)

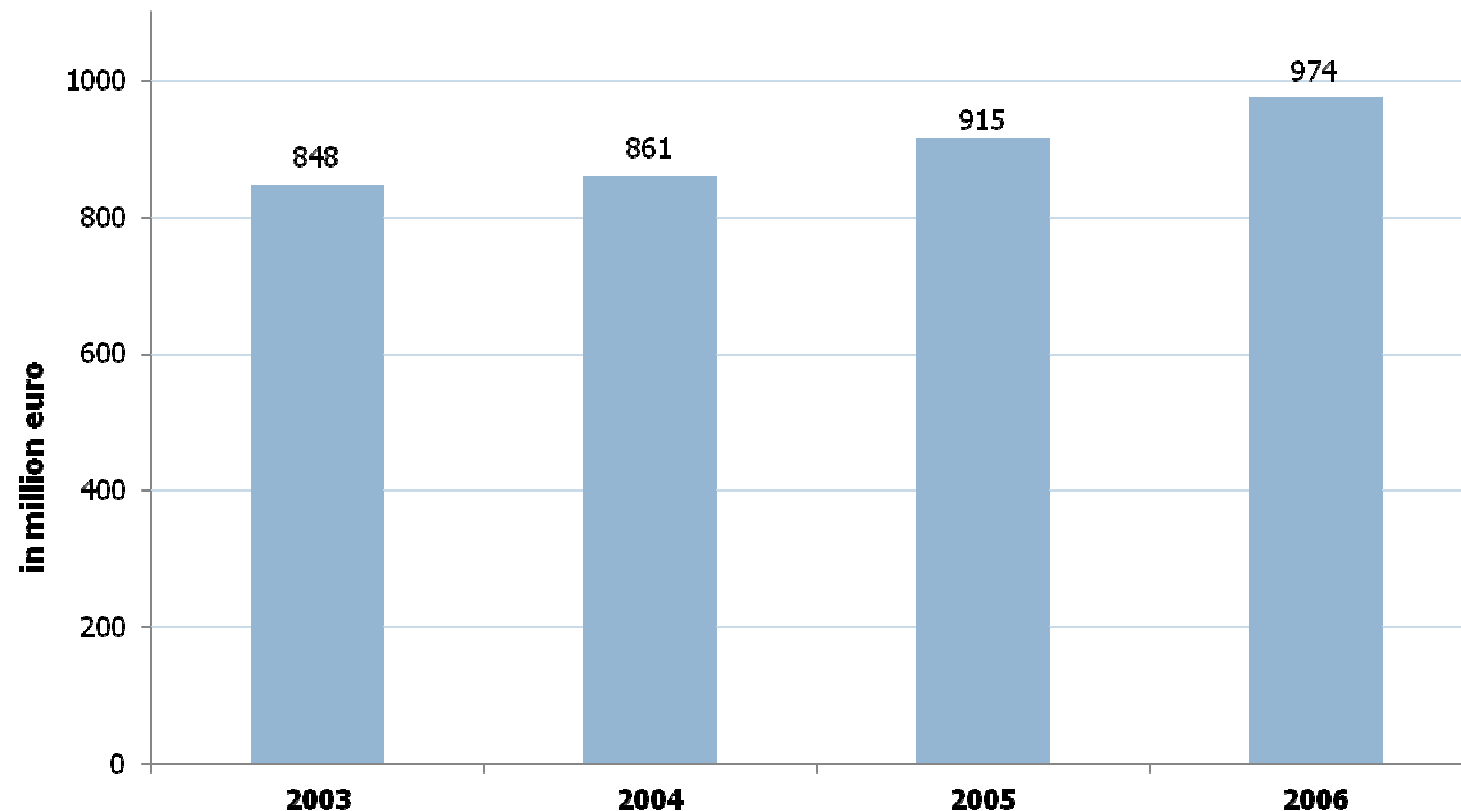
priority axes of ESF Operational Programme focused on innovation:

1. priority axis "human capital (42%)
2. transnational instruments"

### Current Innovation Programmes in Saxony

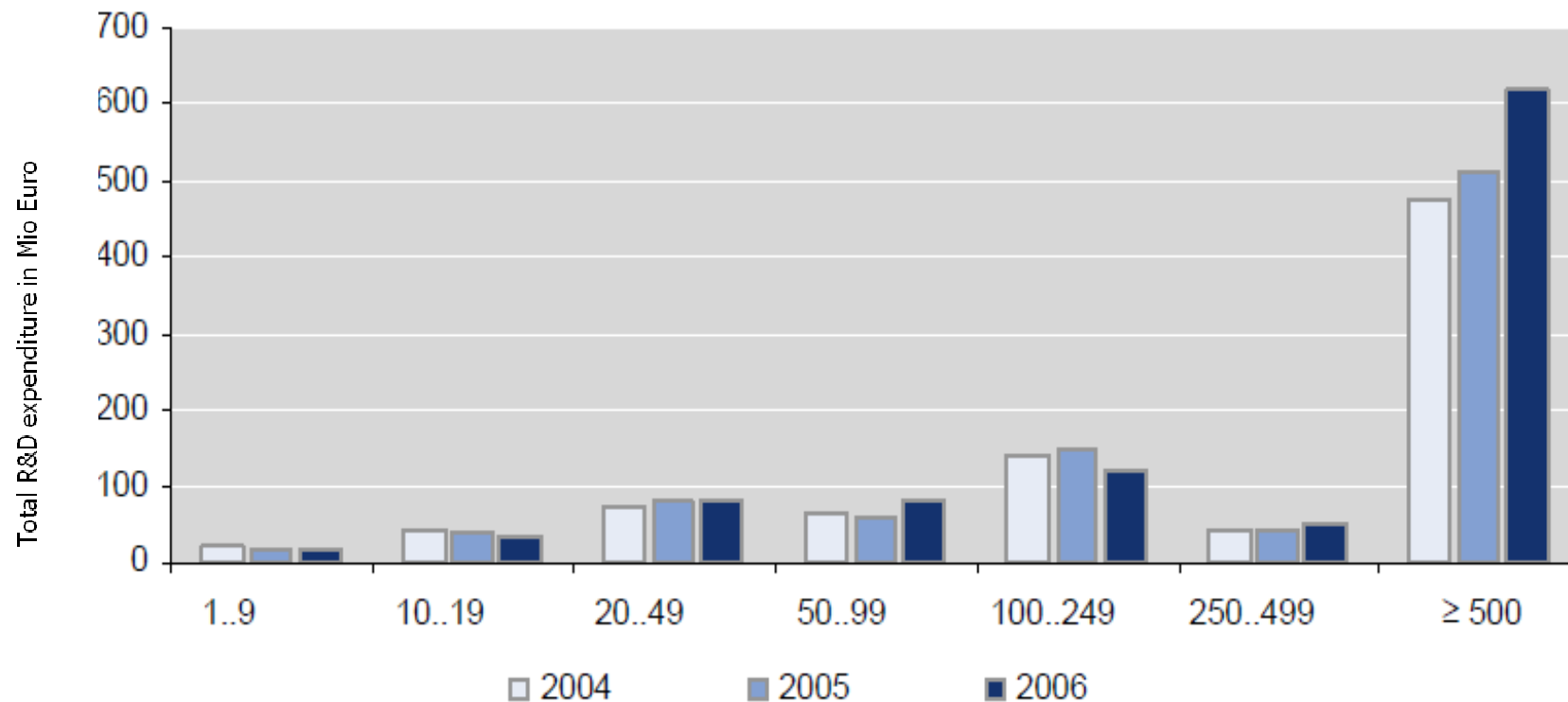
- **Individual R&D Projects** based on future-oriented technology fields and intended to develop new products and processes (ERDF/Saxon subsidies)
- **R&D Joint Projects** of several companies or companies and research facilities: SMEs can get subsidies up to 70% (ERDF/Saxon subsidies)
- **Innovation Assistants** for SME for SME up to 500 employees: 50% of payroll costs, eligibility criterion: innovation policy of the respective companies (ESF)
- **Promotion of Technology Transfer** for SME supports the transfer of new products or the innovation of the processes, from the technology provider to one or more technology receivers, primarily in the sector of future technologies (ERDF/Saxon subsidies).
- **Market Launch of Innovative Projects** for SMEs: financial support up to 50% of the eligible costs, max. 100,000 euro (ERDF/Saxon subsidies)

### R&D expenditure in the economic sector in Saxony



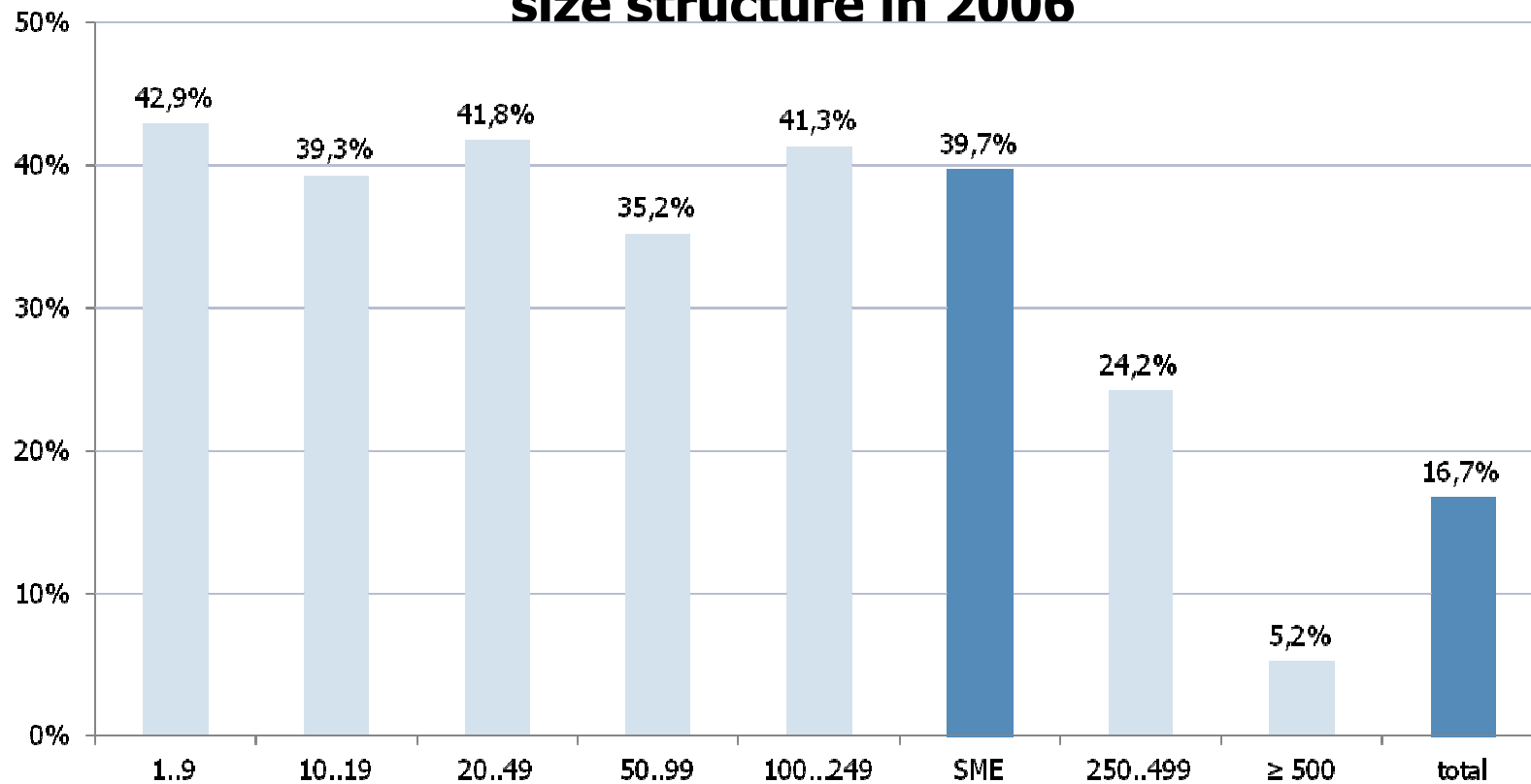
Source: BMWF 2008

### Total R&D expenditure of Saxon enterprises performing continuous R&D by size structure



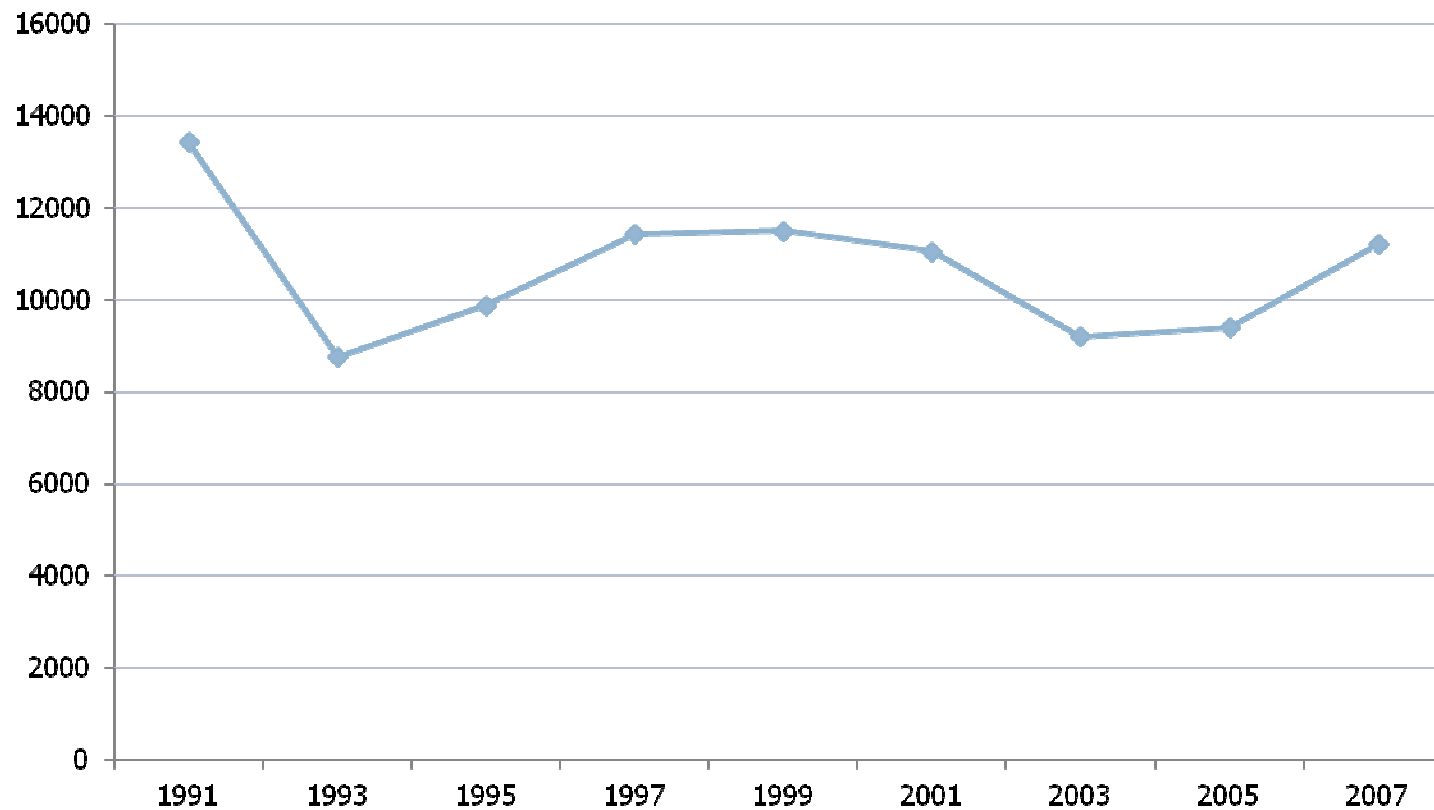
Source: Konzack et al. 2007

### Share of R&D support in total R&D expenditure of supported enterprises with continuous R&D in Saxony by size structure in 2006



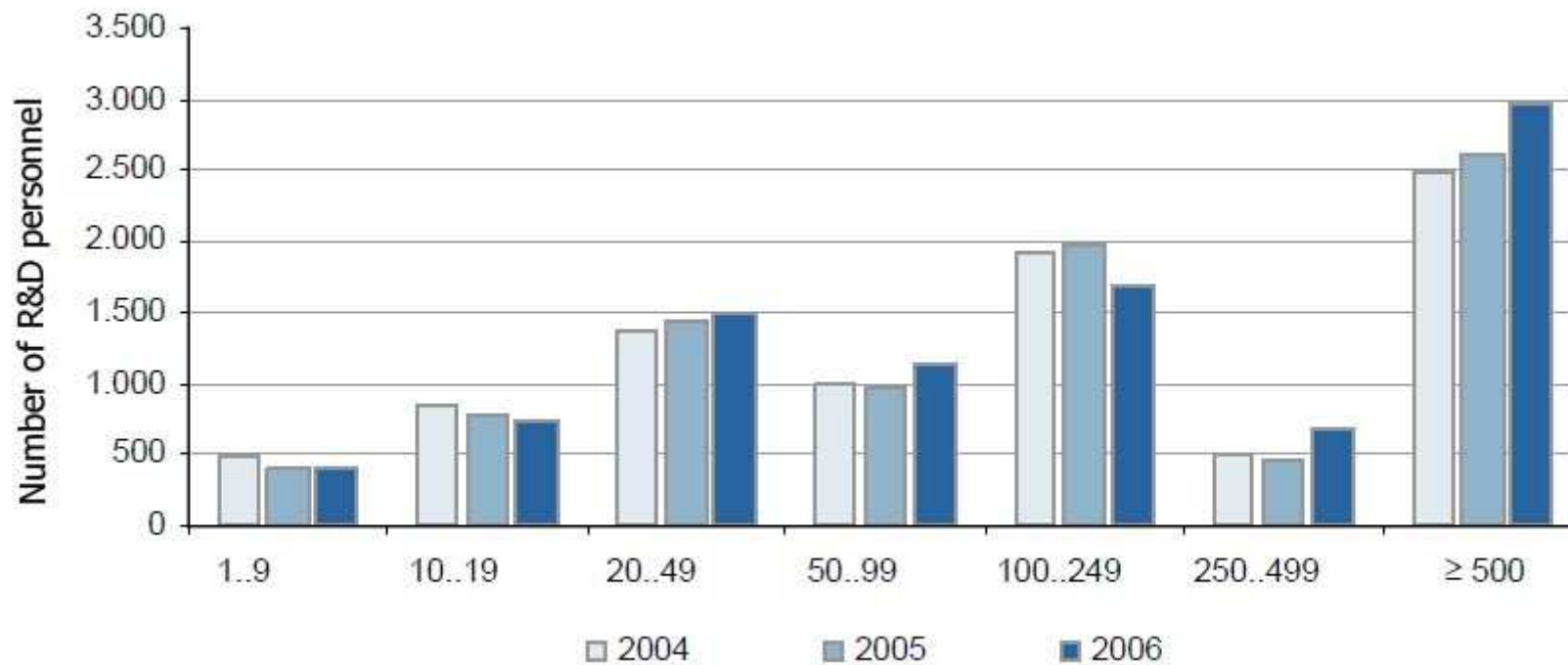
Source: Konzack et al. 2007

### R&D employees in the Saxon economy 1991-2007



Source: Stifterverband 2010

### Growth of R&D personnel in Saxon enterprises with continuous R&D activities by size structure



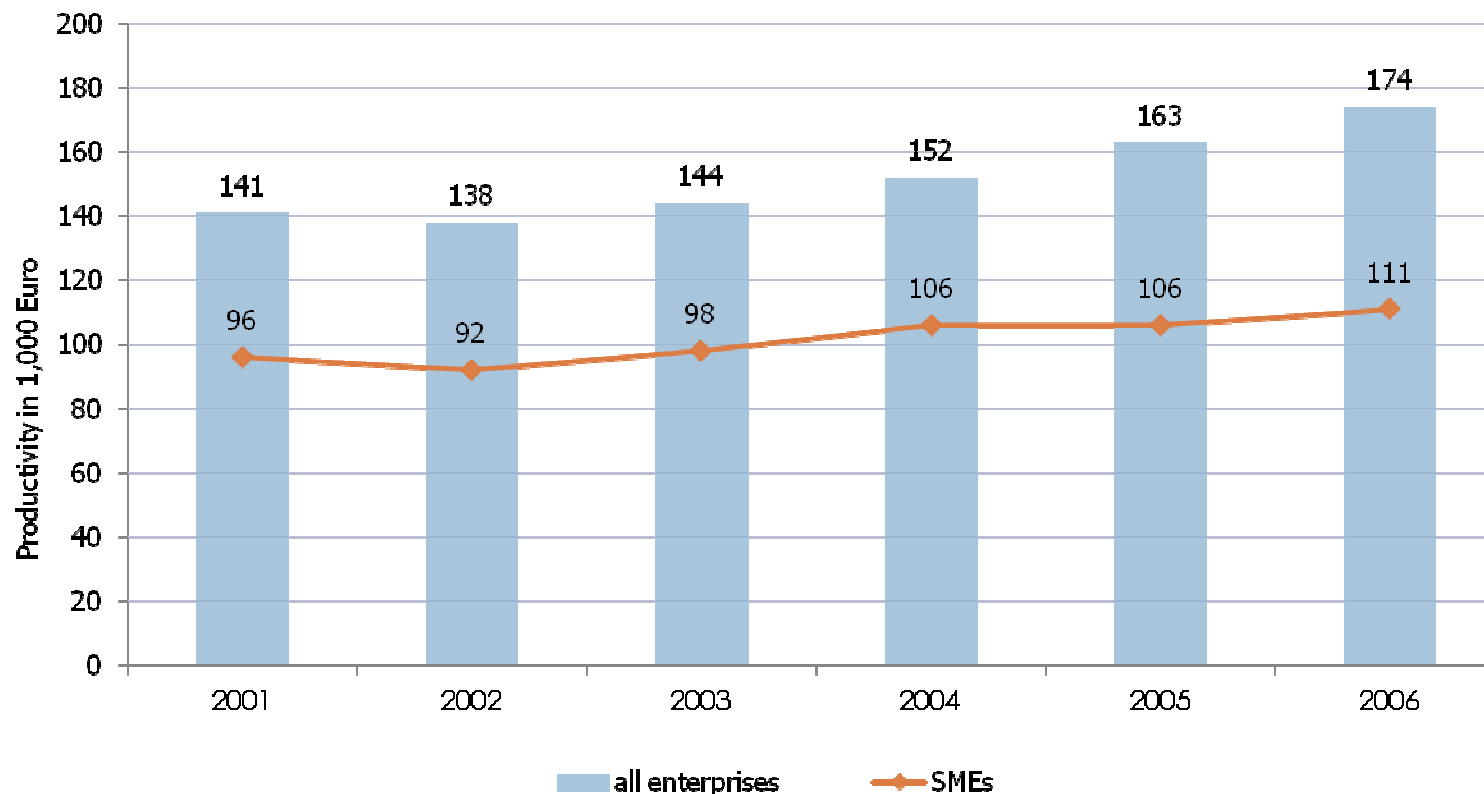
Source: Konzack et al. 2007

### Patent applications per 100,000 inhabitants and patent applications of the economic sector per 100,000 employees 1995-2005

Länder	all patent applications per 100,000 inhabitants			patent applications of the economic sector per 100,000 employees		
	1995	2000	2005	1995	2000	2005
Berlin	27.6	34.5	32.4	44.7	65.4	77.2
Brandenburg	8.0	15.9	16.8	11.8	25.0	35.7
Meckl.- W. P.	5.3	10.5	11.5	7.1	10.3	18.0
Saxony	16.7	22.7	28.7	25.9	37.3	60.4
Saxony -Anhalt	8.7	13.3	12.2	15.1	18.4	25.8
Thuringia	12.9	21.4	28.3	20.9	32.5	55.2
East Germany*	10.2	16.7	19.5	16.2	24.7	39.0
Germany	36.4	49.2	54.1	77.4	111.3	139.1

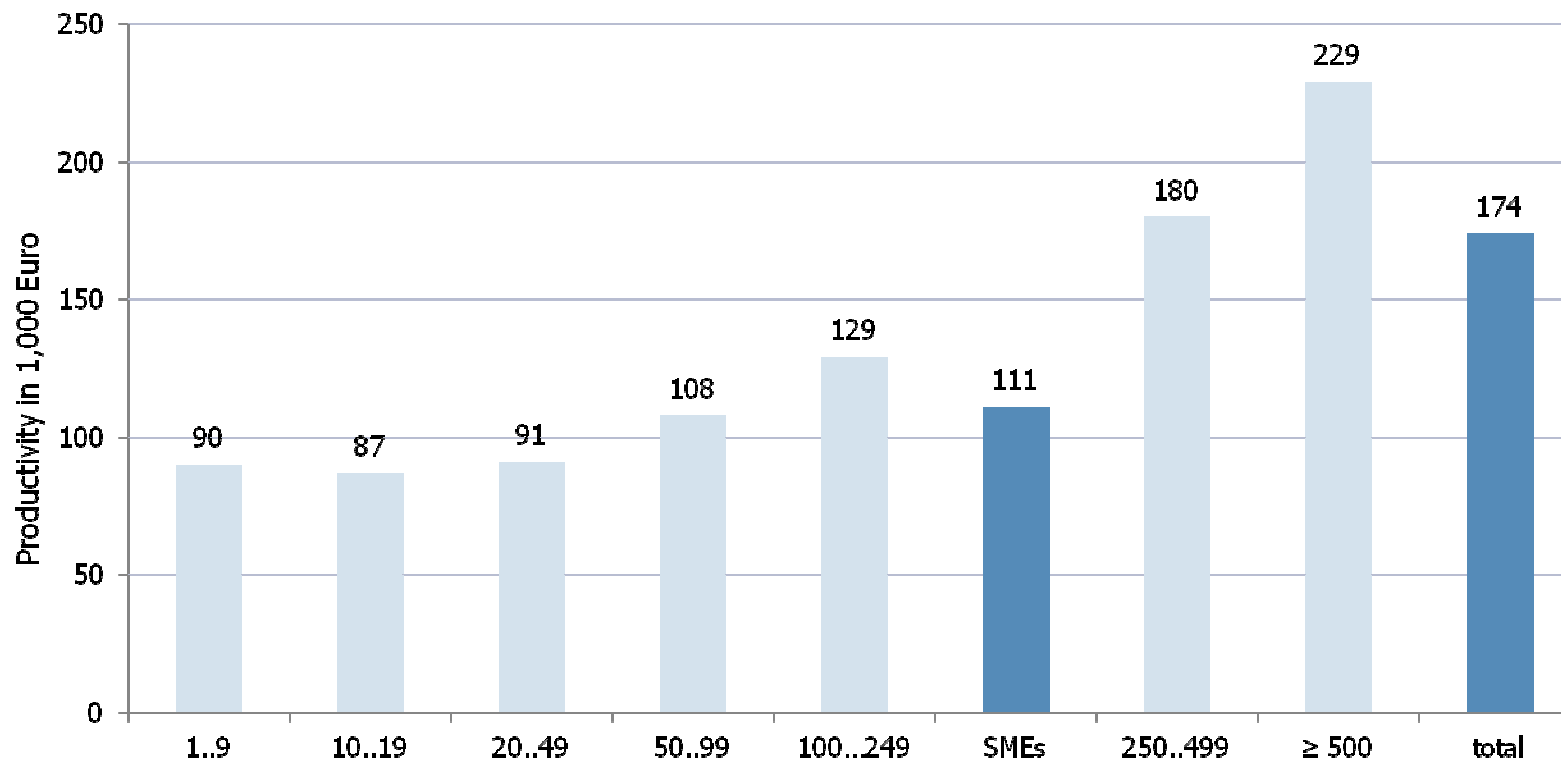
\* Without Berlin because separation of data for East and West Berlin is not possible.  
Source: Patentatlas Deutschland, 2006.

### Productivity in enterprises with continuous R&D activities in Saxony 2001-2006



Source: Konzack et al. 2007

### Productivity in enterprises with continuous R&D activities in Saxony 2006 by size groups



Source: Konzack et al. 2007

#### **Programme Evaluation (implemented by IWH in 2008)**

- Satisfying administrative efficiency  
processing time: 11-18 weeks  
time necessary to file the first application: 9-33 person days
- Despite high priority of networking programmes no empirical evidence of an improved performance of the supported enterprises
- Dead-weight effects may exist in some of the programmes
- High acceptance of the Saxon support system by the recipients (SAB's internal technical evaluation of R&D projects – no risk of proliferation of knowledge advantage)

#### Conclusion

- due to complementarity of local, Länder- and federal German innovation support for SMEs, the exclusive impact of Structural Funds in Saxony is hard to assess
- constant innovation progress of Saxon SMEs, despite their weakness and the unfavourable size structure, not possible without Structural Funds support
- current support lines have been successful and should be continued



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**Thank you for your  
Attention!**

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