

Effects of Fiscal Decentralization on Public Sector Growth in Austria

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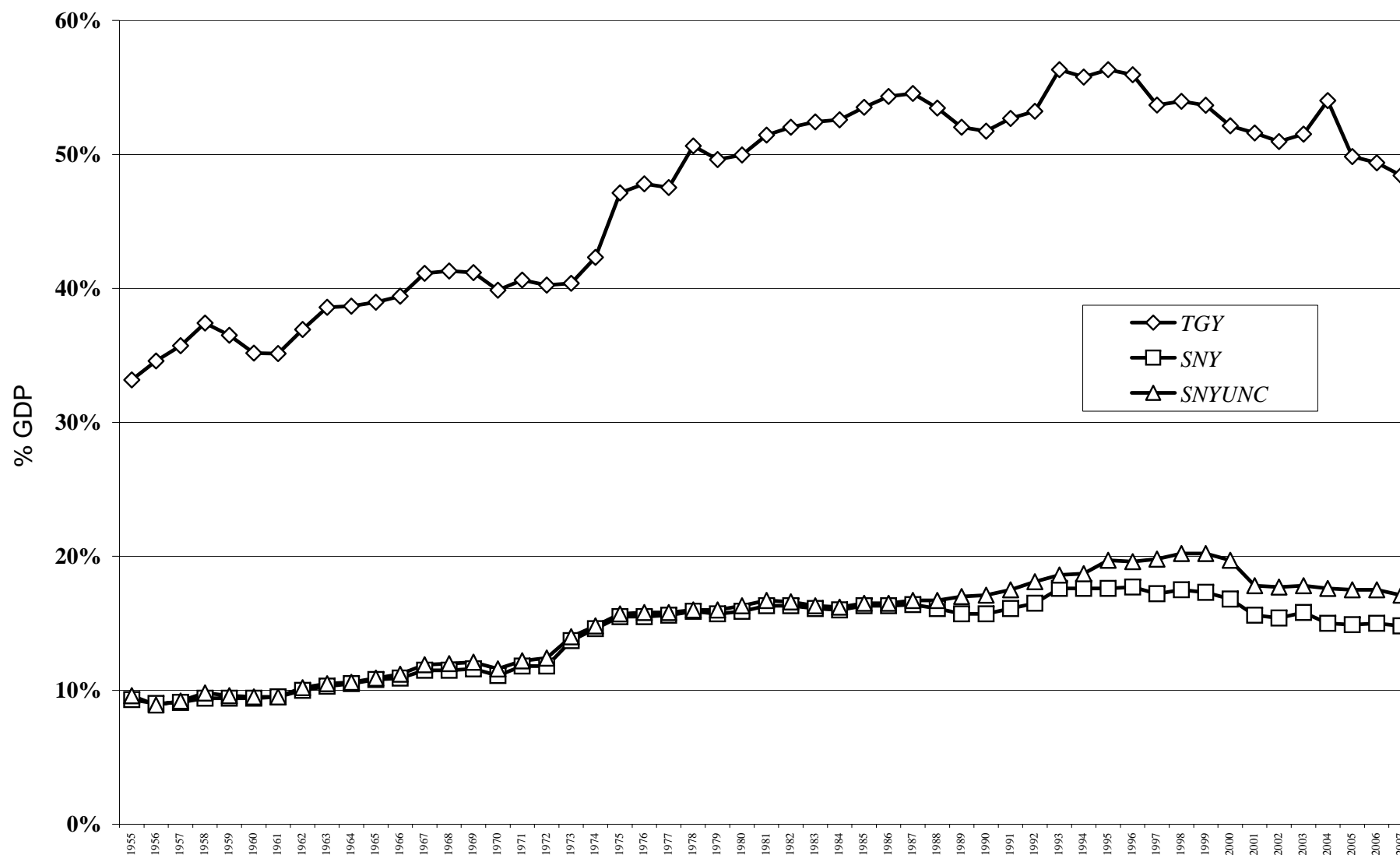
Our presentation

- **Fiscal decentralization and public sector growth: theoretical and empirical issues**
- **Fiscal decentralization in Austria (1955-2007)**
- **Assessment of the influence of fiscal decentralization on public sector growth**
- **Results and conclusions**

Public Sector Growth

- **Wagner's Law of Growing State Activities**
 - Positive income elasticity of public goods and services
- **Baumol's Cost Disease**
 - Increasing price level of public relative to private goods and services
- **Displacement Effect**
 - Permanent increase of public expenditure
- **Public Choice**
 - Ideology, „war of attrition“, political business cycle
- **Public Finance and Stabilization**
 - Unemployment, fiscal illusion
- **Empirical papers: Neck and Getzner (2002, 2007)**

Public Sector Growth: Austria 1955-2007



Fiscal Decentralization and Public Sector Growth

■ Decentralization / autonomy of public services

- Transfer of authority and responsibility for public services from national to sub-national level
- Complexity of legal, functional, expenditure and financing responsibility on different levels of government
- Reorganization of political, institutional, administrative, financial or service delivery systems

■ Fiscal decentralization

- Tax sharing and transfer system
- Tax competition

■ Efficiency of federalism

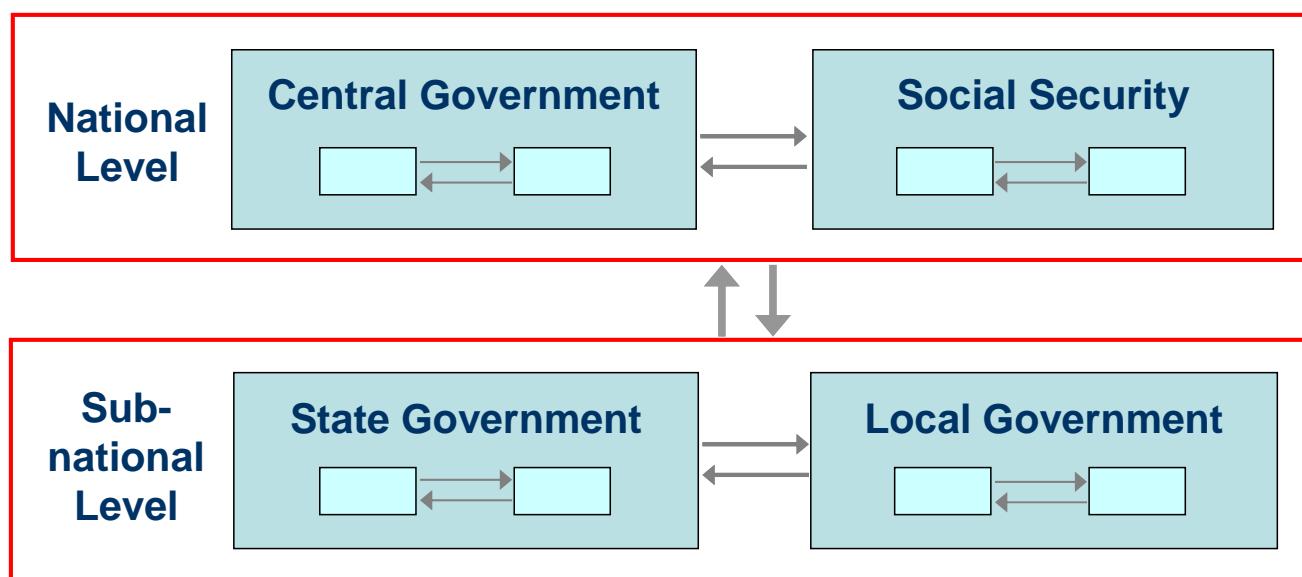
- Closer to people & local preferences
- Better information & dealing with spill-overs
- Subsidiarity

■ Inefficiency of federalism

- Fiscal illusion of policy makers
- Collusion between policy-makers

Data on Fiscal Decentralization in Austria

- Non-financial expenditure and revenue (acc. to ESA 95)
- National government and sub-national government
- Consolidated and unconsolidated
- Period 1955-2007
 - changing definitions, statistical breaks esp. 1976 / 1995



Indicators of Fiscal Decentralization

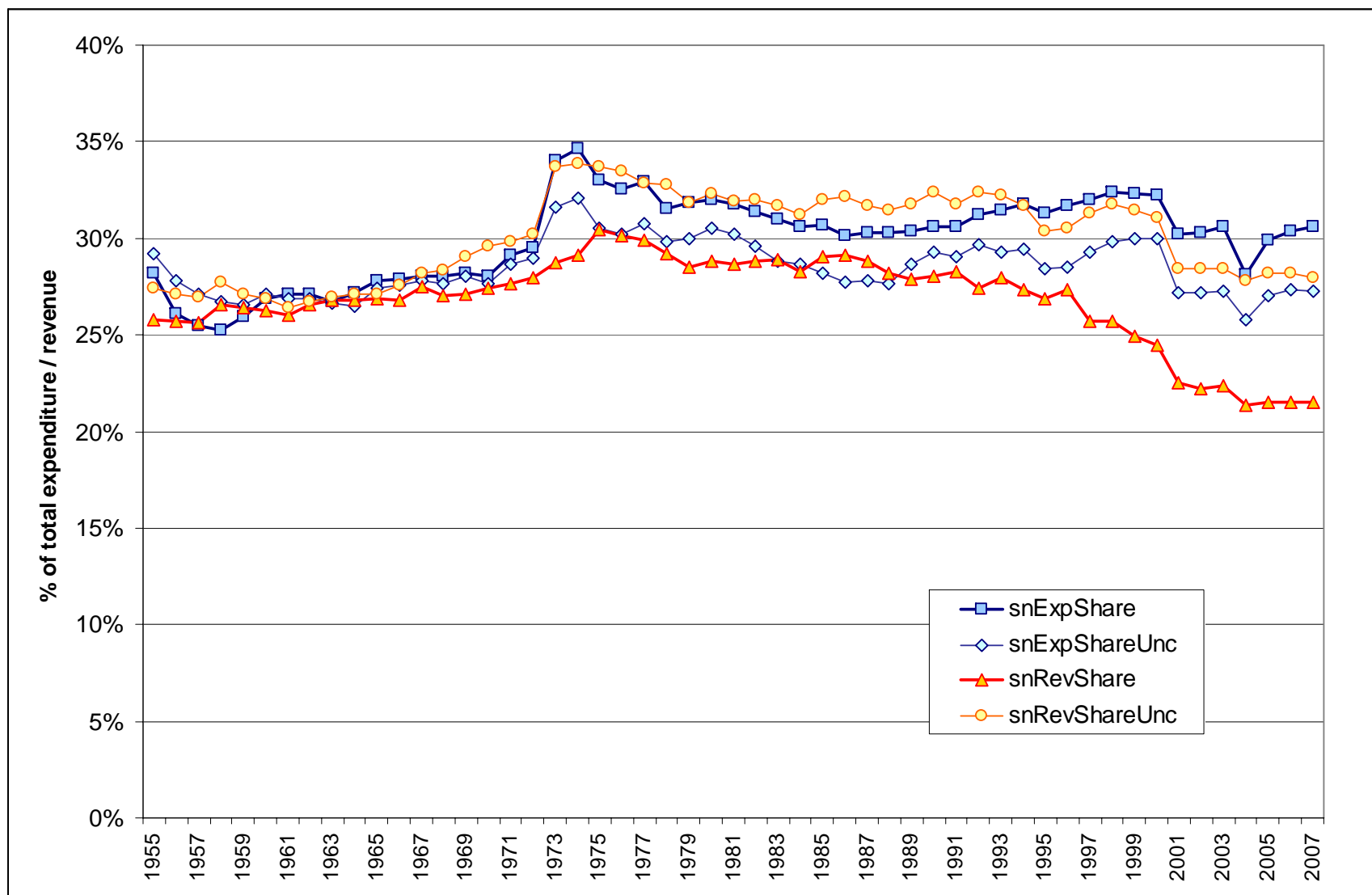
Sub-national expenditure and revenue

<i>SnExpShare</i>	Share of sub-national expenditure (consolidated) to total government expenditure (consolidated)
<i>SnExpShareUnc</i>	Share of sub-national expenditure (unconsolidated) to total government expenditure (unconsolidated)
<i>SnRevShare</i>	Share of sub-national revenue (consolidated) to total government revenues (consolidated)
<i>SnRevShareUnc</i>	Share of sub-national revenue (unconsolidated) to total government revenues (unconsolidated)

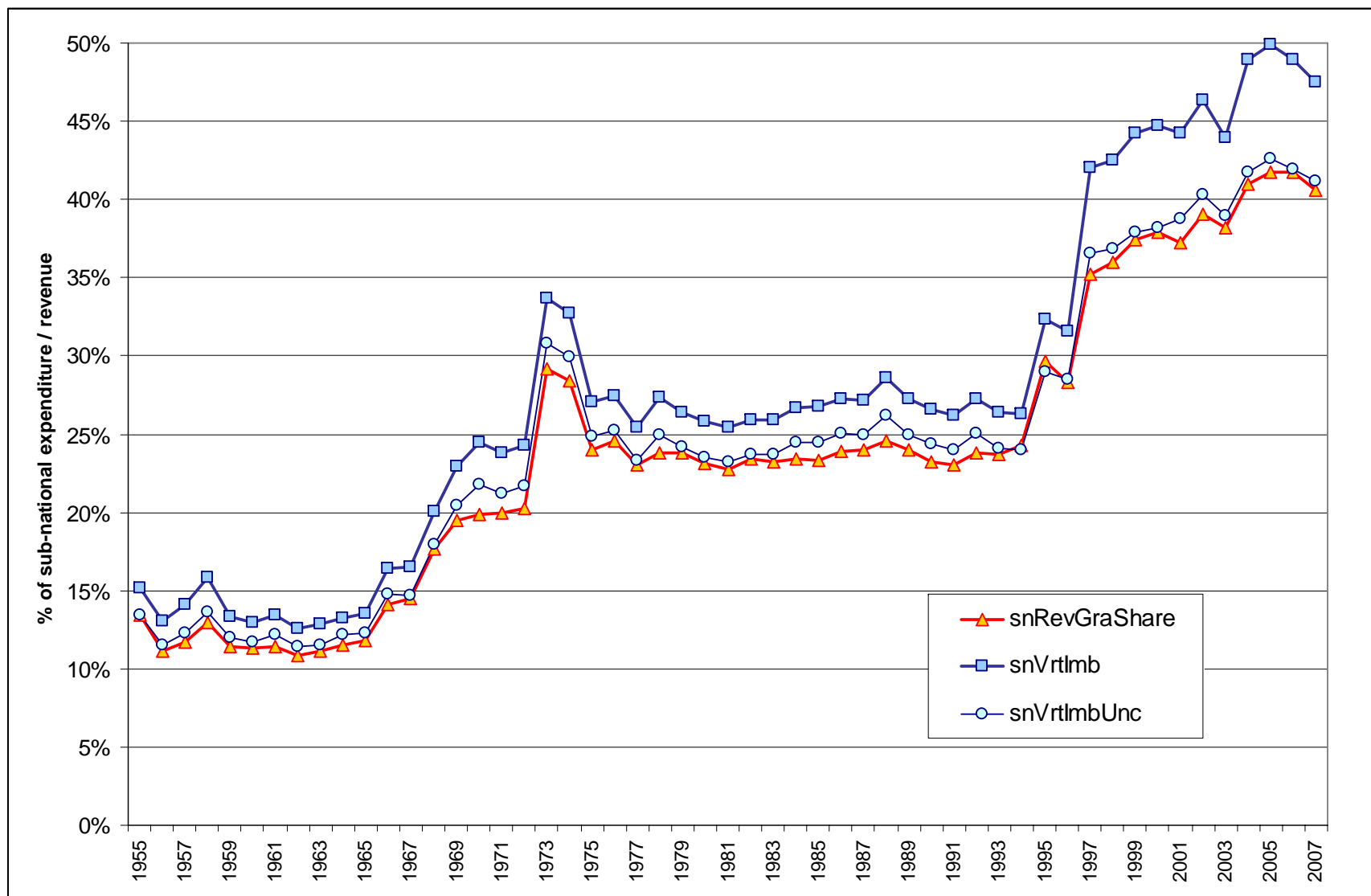
Intergovernmental grants

<i>SnRevGraShare</i>	Share of sub-national grants received to total sub-national revenues (unconsolidated)
<i>SnVrtImb</i>	Share of sub-national grants received to total sub-national expenditure (consolidated)
<i>SnVrtImbUnc</i>	Share of sub-national grants received to total sub-national expenditure (unconsolidated)

Fiscal Decentralization: Austria 1955-2007



Fiscal Decentralization: Austria 1955-2007



Data on Fiscal Autonomy in Austria

- **Subdivision of revenues from taxes and intergovernmental grants with respect to degree of sub-national autonomy**
- **Data based on national public finance statistics**

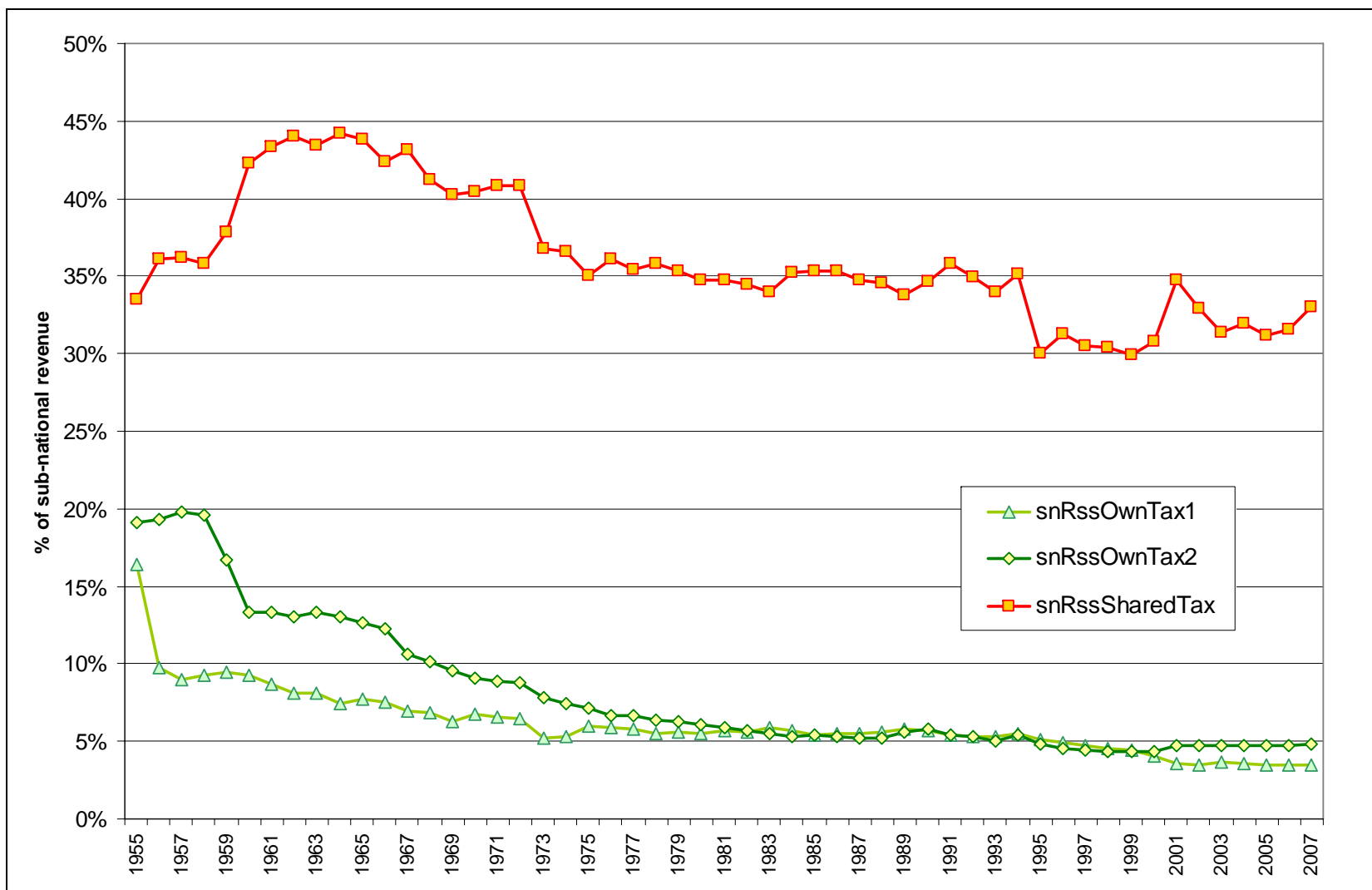
- **Potential remaining shortcomings concerning influence on public sector growth**
 - Complexity of transfer system
 - Different views on autonomy for state and local governments
 - Insufficient classification of tax autonomy
 - No data on expenditure autonomy and functional responsibility
 - Definition of public sector (esp. quasi-corporations, public enterprises)

Indicators of Fiscal Autonomy

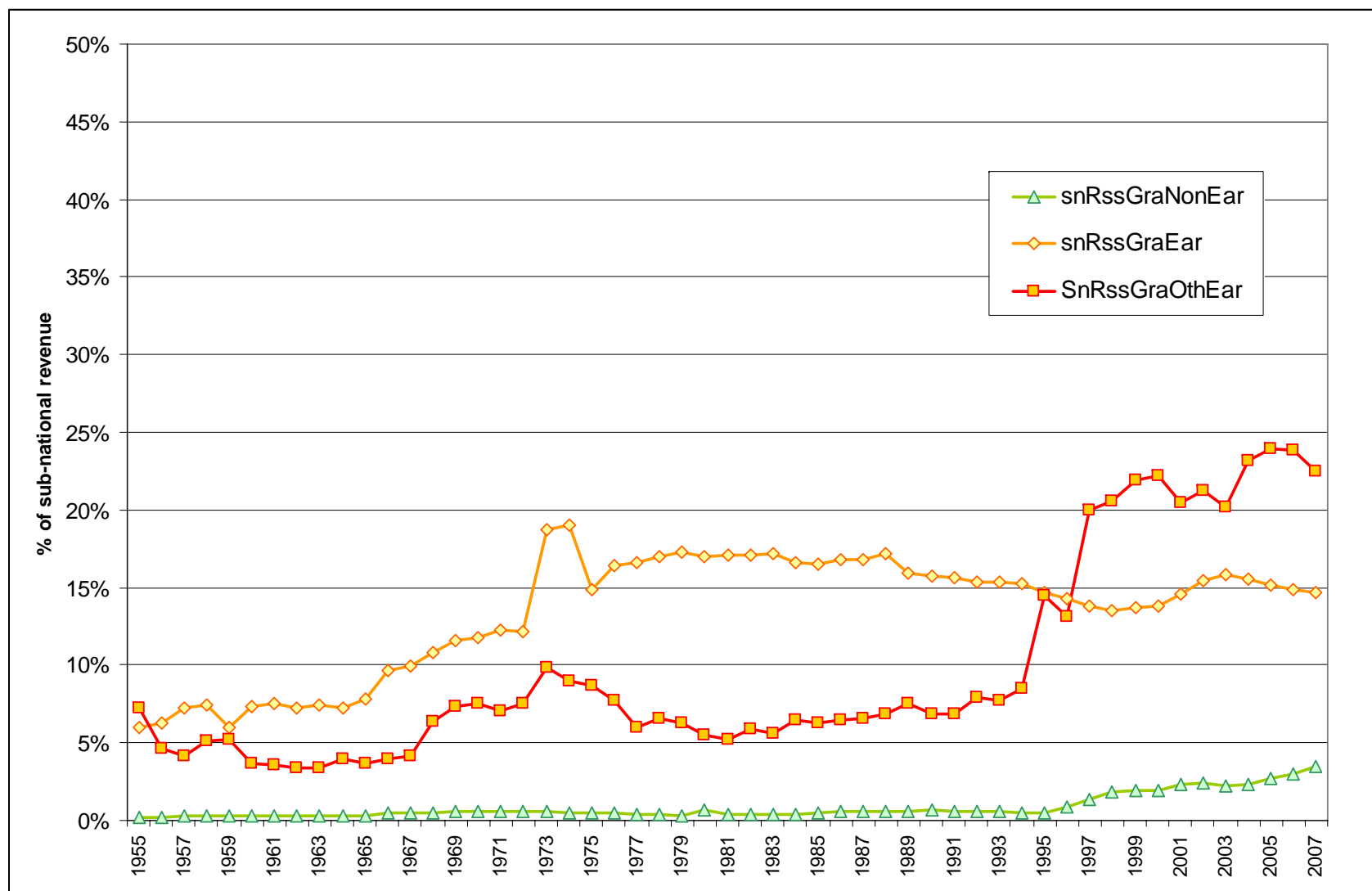
% of sub-national revenue (unconsolidated)

<i>SnRssOwnTax1</i>	Own tax revenues where sub-national governments set tax bases, rates and reliefs, or higher level governments set upper and lower limits on the rate chosen;
<i>SnRssOwnTax2</i>	Own tax revenues where tax bases and rates are set by higher level government
<i>SnRssSharedTax</i>	Shared taxes distributed by the Austrian Revenue Sharing System which is based on political consensus between the public authorities
<i>SnRssGrantNonEar</i>	Non-earmarked grants (with consent in negotiations on the Austrian Revenue Sharing Act between the public authorities)
<i>SnRssGrantEar</i>	Earmarked grants (with consent in negotiations on the Austrian Revenue Sharing Act)
<i>SnRssGrantOther</i>	Other earmarked grants from other levels of government (regulated outside the Austrian Revenue Sharing System by higher-level governments)

Fiscal Autonomy: Austria 1955-2007



Fiscal Autonomy: Austria 1955-2007



Econometric Results: Cointegration

	TGY_t
$YRPOP_t$	$H0$
NSY_t	$H0^*$
UR_t	$H0^{**}$
$HERF_REV_t$	$H0$
$SNEXPSHARE_t$	$H0^{**}$
$SNEXPSHAREUNC_t$	$H0^*$
$SNREVSHARE_t$	$H0^*$
$SNREVSHAREUNC_t$	$H0$
$SNREVGRASHARE_t$	$H0$
$SNVRTIMB_t$	$H0^*$
$SNVRTIMBUNC_t$	$H0^*$

	Est. 1	Est. 2	Est. 3	Est. 4	Est. 5	Est. 6	Est. 7
C	28.5740	19.9913	21.5939	14.1519	14.5170	13.9831	23.0468
	2.7266***	5.9521***	8.5479***	7.347***	4.2931***	8.8679***	6.3701***
YRPOP _t	2.7210	2.8880	3.1204	3.0343	2.9870	3.0801	3.5768
	6.8728***	17.0682***	69.2625***	12.5896***	7.9388***	15.6243***	70.0210***
YRPOP _t ²	-0.0612	-0.0675	-0.0728	-0.0652	-0.0647	-0.0665	-0.0818
	-5.5045***	-15.0899***	-784.8728***	-9.9289***	-5.0826***	-12.2933***	-998.1880***
NSY _t	-0.5887	-0.7399	-0.9235	-0.7323	-0.7758	-0.6778	-1.1021
	-3.7881***	-6.6611***	-9.5054***	-5.3276***	-4.6583***	-6.3486***	-6.0868***
UR _t	0.9891	0.8266	0.7568	0.8734	0.8713	0.8883	0.5995
	4.5837***	5.2544***	6.2509***	5.5402***	3.9112***	7.1119***	3.7600***
D2004A	3.1918***	2.2652	2.1986	3.2441	3.2024	3.1334	2.5536
	4.7044***	5.1124***	3.3911***	5.8689***	4.4057***	6.4791***	4.6227***
D1997A	-0.9200	-1.3107	-0.8817	-0.7467	-1.2183	-0.6257	-0.6914
	-3.4656***	-2.4243**	-2.2219**	-2.2122***	-1.4670	-1.5181	-5.1883
HERF_REV _t	-38.0816						
	-1.6121*						
SNEXPSHAREUNC _t		-20.2672					
		-1.5080					
D1976*SNEXPSHAREUNC _t		3.9062					
		1.7339*					
SNREVSHAREUNC _t			-31.5839				
			-3.8153***				
D1976*SNREVSHAREUNC _t			2.5445				
			1.4584				
SNREVGRASHARE _t				-12.0071			
				-2.2943***			
SNVRTIMB _t					-10.1234		
					-1.9238***		
SNVRTIMBUNC _t						-12.3817	
						-3.0047***	
SNRSSHARE _t							-38.6288
							-3.6522***
AR(1)	0.6382	0.5247	0.5343	0.6071	0.5744	0.5724	0.4399
	6.0604***	7.8231***	8.9890***	8.6451***	9.0172***	9.6037***	6.3097
Adj. R ²	0.9815	0.9789	0.9792	0.9806	0.9797	0.9801	0.9807
S.E. of regression	0.9503	1.0161	1.0070	0.9750	0.9966	0.9877	0.9701
Log likelihood	-60.0581	-57.7615	-56.8711	-58.3532	-57.7216	-56.7764	-62.8144
F-statistic	247.5426***	170.0028***	173.1144***	198.9970***	190.3287***	193.8522***	261.076***
Durbin-Watson stat.	1.7312	1.6756	1.7401	1.6838	1.6252	1.6146	1.5734
Akaike crit.	2.7714	2.7985	2.7642	2.7828	2.7585	2.722171	2.8390
Schwarz crit.	3.2217	3.3613	3.3271	3.3081	3.2838	3.247506	3.2518
Period	1956-2007	1956-2007	1956-2007	1956-2007	1956-2007	1956-2007	1956-2007
Observations	52	52	52	52	52	52	52

Econometric Results

Discussion of Results I

- **The Usual Suspects**
 - Per-capita GDP, net surplus, unemployment rate
- **Fiscal decentralization has a dampening effect on government expenditure in Austria**
- **Financing of decentralized public services by**
 - extending sub-national tax base („autonomy“)
 - provision of (ear-marked) transfers („decentralization“)
- **Dampening effects of transfers?**
 - **Inefficiency** of transfers (transaction costs)
 - **Efficiency** of transfers (economical use of grants)
 - **Incentives** of transfers (limitations by grant donor)

Discussion of Results II

- **Limitations of sub-national expenditure?**
 - Lower revenue raising power & financing ability
 - Financial distress imposing restrictions on expenditure
 - National „Stability and Growth Pact“ meeting budget deficit criteria
- **(Political) incentive compatibility?**
 - for national government
 - for sub-national governments
- **Fiscal decentralization vs. fiscal autonomy?**
 - Results indicate that the „Austrian system of decentralization“ may reduce total government expenditure
 - Federalism – autonomy has to be explored in future research

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