

Online Appendix to:  
Do Output Contractions Cause Investment in  
Fiscal Capacity?

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Table A1: Selected Sales Tax Base Changes in Inter-War Years

Country	Year	Narrative
Italy	1919	<i>“Sales taxation in Italy was also a product of the financial problems created by World War I. The original tax was imposed in 1919, modified substantially in 1930, and almost completely remodeled in 1941.”</i> (Due, 1955b, p. 312)
France	1920	<i>“A general sales tax was first introduced in France in 1920, to meet pressing revenue needs resulting from World War I in a situation in which substantial revenues from income taxation were difficult to obtain. This first tax took the turnover form, applying at a 2 per cent rate to all sales, including those at retail.”</i> (Due, 1955b, p. 315)
Belgium	1921	<i>“Belgium has employed a general sales tax since 1921, with a development largely independent of the taxes in neighboring countries. The Germans did not interfere with the tax during World War II, the tax structure being essentially the same today as in 1927, except for changes in rates and increased use of the fortaitaire principle described below. The tax is a multiple-stage levy in form, with retail sales excluded from its scope, but the cascade features are restricted by single-stage collection on a number of goods, along the lines of the prewar Austrian tax.”</i> (Due, 1955b, p. 309)
Austria	1923	<i>“Sales taxation in Austria dates back to the imposition of a 1 per cent turnover tax in 1923 to meet post-World-War-I financial difficulties.”</i> (Due, 1955b, p. 304) <i>“This tax differed from other turnover taxes in that it was collected but once on each commodity, usually at the manufacturing stage, under a system known as phasenpauschalierung—a term which defies translation.”</i> (Due, 1955b, p. 304)
Canada	1924	<i>“The federal government’s general sales tax, the manufacturers’ sales tax (MST), had been introduced in 1924 as a levy on all goods manufactured in Canada or imported into Canada. The tax rate in the immediate post-war years was 8 percent; it rose to 10 percent in 1951.”</i> (Poddar and English, 1995, p. 1101) <i>“Saskatchewan and Quebec had introduced retail sales taxes in 1937 and 1940, respectively.”</i> (Poddar and English, 1995, p. 1105) Note, real per capita GDP fell 17 percent between 1917 and 1924 (Bolt and van Zanden, 2014).
Australia	1930	<i>“The onset of the 1930s Great Depression had a significant impact on the (then) federal government’s ability to raise revenue, particularly through customs duties.”</i> <i>“Faced with a large budget shortfall, the government introduced the wholesale sales tax (WST) in 1930.”</i> <i>“The WST was levied at the wholesale level to minimise the number of taxing points.”</i> (Reinhardt and Steel, 2006)
Netherlands	1933	<i>“In 1933 a single-stage manufacturers’ sales tax, similar to the Canadian tax, was established to bolster depression-reduced revenues. The tax was applied at a 4 per cent rate to the sales of finished products by the manufacturer, with exemptions limited to a few basic food products and export transactions.”</i> (Due, 1955b, p. 306)
Norway	1933	<i>“The Norwegian sales tax, introduced to meet financial problems arising from the depression of the ‘thirties, is the only example in western Europe of a single-stage retail sales tax. The tax was established in 1933 as a 1 per cent general turnover tax on all wholesale and retail sales, except non-retail sales by manufacturers.”</i> (Due, 1955a, p. 173)

Table A2: States with an Individual Income Tax in 1929

State	Change to Existing Income Tax Schedule When Retail Sales Tax Introduced
Arkansas	None.
Missouri	None.
Mississippi	Exemption threshold reduced from \$1,500 to \$750 (8.9 to 6.1 times mean income) and top marginal rate increased from 4.5 to 5 percent; other brackets and marginal rates unchanged.
North Carolina	Tax bracket thresholds reduced and marginal rates increased in year following introduction of retail sales tax.
North Dakota	Bracket thresholds and some marginal rates reduced together with introduction of sales tax; changes to income tax base subsequently reversed.
New York	Exemption threshold reduced from \$2,500 to \$1,000 (3.7 to 1.6 times mean income) with no change in marginal rates or tax bracket thresholds; on repeal of sales tax income tax bracket thresholds were reduced and a more graduated rate structure was introduced.
Oklahoma	Large reduction in bracket thresholds (bottom bracket from \$10,000 to \$2,000) and lower more graduated rate structure introduced; exemption threshold increased from \$750 to \$1,000.

Notes: *Exemption threshold* is the dollar value of any per return exemption. Data are for single filer type; changes to thresholds are qualitatively similar for joint filers. Fourteen states introduced both a retail sales tax and an income tax in the 1930s, and 7 states introduced a retail sales tax but not an income tax in the 1930s. Sources: Due and Mikesell (1994), Bakija (2009).

Table A3: Additional Detail on Sources for U.S. Data

Data	Source
State government spending and revenues	U.S. Census Statistical Abstract: 1927 data: 1929 edition, Tables 228 and 229; 1929 data: 1931 edition, Table 218; 1932 data: 1937 edition, Table 218; 1937 data: 1939 edition, Table 223; 1942 data: 1943 edition, Table 292; 1947 data: 1949 edition, Table 414; 1952 data: 1954 edition, Table 467.
State government tax revenues	U.S. Census Statistical Abstract: 1932 data: 1937 edition, Table 218; 1937 data: 1939 edition, Table 223.
State government tax revenues by detailed category: 1932	Finance Statistics of State and Local Governments: 1932 (Wealth, Public Debt and Taxation), Table 1.
General sales tax revenue	U.S. Census Statistical Abstract: 1939 data: 1940 edition, Table 224; 1940 data: 1941 edition, Table 234; 2012 data: U.S. Census Bureau, 2012 Census of Governments: Finance - Survey of State Government Tax Collections, Series T004.
State government debt	U.S. Census Statistical Abstract: 1880, 1890, 1902, 1912, 1922, 1927 data: 1929 edition, Table 230; 1928, 1929 data: 1931 edition, Table 219; 1930 data: 1933 edition, Table 206; 1931, 1932 data: 1937 edition, Table 224; 1937 data: 1941 edition, Table 243; 1947 data: 1948 edition, Table 402; 1952 data: 1953 edition, Table 436. 1942 data: Governmental Finances in the United States 1942, Table 12.
Assessed property values	U.S. Census Statistical Abstract: 1929 data: 1931 edition, Table 214; 1932 data: 1939 edition, Table 219; 1937 data: 1939 edition, Table 219.
Retail sales tax rates	1938 data: Due and Mikesell (1994, p. 46-47); 2012 data: Drenkard (2014).
Population centers, 1930	U.S. Census Bureau: Available at: <a href="http://census.gov/geo/reference/centersofpop.html">census.gov/geo/reference/centersofpop.html</a>
New Deal programs	Fishback and Kachanovskaya (2010, Table 1)
New Deal activity	Reading (1973, Tables A1, A2, A3)
Personal income	U.S. Department of Commerce, Bureau of Economic Analysis: Available at: <a href="http://www.bea.gov/regional/">http://www.bea.gov/regional/</a>
State population	U.S. Census Bureau: Available at: <a href="http://www.census.gov/popest/">http://www.census.gov/popest/</a>

Table A4: Additional Detail on Sources for Cross-Country Data

Variable	Description and source
IMF	IMF program participation. Attribution: Dreher (2006). Updated from: <a href="http://uni-heidelberg.de/fakultaeten/wiso/awi/professuren/intwipol/datasets_en.html">uni-heidelberg.de/fakultaeten/wiso/awi/professuren/intwipol/datasets_en.html</a>
EU	Member countries of the European Union, years of membership. Source: <a href="http://europa.eu/about-eu/countries/index_en.htm">europa.eu/about-eu/countries/index_en.htm</a>
OECD	List of OECD member countries, years of membership Source: <a href="http://oecd.org/about/membersandpartners/list-oecd-member-countries.htm">oecd.org/about/membersandpartners/list-oecd-member-countries.htm</a>
Region	World Bank country and lending groups; separate region created for Former Soviet Republics. Source: <a href="http://data.worldbank.org/about/country-and-lending-groups">data.worldbank.org/about/country-and-lending-groups</a>

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