

Online Appendix to the Paper  
*Tax Revenues, Development and the Fiscal Cost  
of Trade Liberalization, 1792-2006*

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# 1 Data appendix

Several issues arise when defining tax revenues which explain why different sources sometimes provide different information for the same years. The first is that in many countries several levels of government levy tax revenues but information on local and regional tax revenues is scarce. We follow Mitchell (2007) in keeping only central government tax revenues wherever possible. The GFS data differentiates between central and total government revenue but Baunsgaard and Keen (2010) do not specify whether total tax revenues include local and regional revenues.<sup>1</sup> A second issue arises when governments (or other public institutions) levy social security contributions separately from tax revenues. GFS is the only source which explicitly differentiates between the two, we choose not to include social security contributions to avoid capturing changes in total tax revenues that are due to the inclusion of social security contributions. Unfortunately Mitchell (2007) and Baunsgaard and Keen (2010) do not specify how they handle social security contributions, our educated guess from looking at the data is that Baunsgaard and Keen (2010) typically do but Mitchell (2007) does not. Trade taxes are only levied by federal governments and never in the form of contributions to social security funds so these choices only affect our construction of the total tax revenue variable. Our measure of episodes of decreases in trade tax revenues is unaffected by these methodological choices.

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<sup>1</sup>Our educated guess is that they do for large federal countries but do not when local and regional governments levy a small share of total taxes.

Table 1: Data sources

Country	Country Group	Total Coverage	GFS Coverage	MIT Coverage	TPD Coverage
Afghanistan	LIC	2003 to 2006	2003 to 2006		
Albania	MIC	1995 to 2004	1995 to 2004		
Algeria	MIC	1980 to 2006			1980 to 2006
Argentina	HIC	1935 to 2001		1935 to 1992	1993 to 2001
Armenia	HIC	2003 to 2006	2003 to 2006		
Australia	HIC	1965 to 2002		1965 to 2002	
Austria	HIC	1924 to 2005		1924 to 1993	1994 to 2005
Bangladesh	LIC	1978 to 2005			1978 to 2005
Belarus	HIC	1996 to 2006	1996 to 2006		
Belgium	HIC	1934 to 2005		1934 to 1993	1994 to 2005
Benin	LIC	1976 to 2005			1976 to 2005
Bolivia	MIC	1985 to 2002			1985 to 2002
Botswana	MIC	1981 to 2006			1981 to 2006
Brazil	MIC	1900 to 1998	1993 to 1998	1900 to 1992	
Bulgaria	MIC	1924 to 2006	1992 to 2006	1924 to 1941	
Burkina Faso	LIC	1975 to 2004			1975 to 2004
Burundi	LIC	1975 to 2005			1975 to 2005
Cameroon	LIC	1975 to 2006			1975 to 2006
Canada	HIC	1926 to 2005		1926 to 1995	1996 to 2005
CAR	LIC	1979 to 2005			1979 to 2005
Chad	LIC	1983 to 2005			1983 to 2005
Chile	HIC	1908 to 2004		1908 to 1973	1975 to 2004
China	MIC	1979 to 2001			1979 to 2001
Colombia	MIC	1945 to 2006		1945 to 1973	1975 to 2006
Comoros	LIC	1980 to 2001			1980 to 2001
Congo, Dem. Rep.	LIC	1998 to 2002	1998 to 2002		
Congo, Rep.	MIC	1980 to 2003			1980 to 2003
Costa Rica	MIC	1978 to 2006	2001 to 2006		1978 to 2000
Cote d'Ivoire	LIC	1979 to 2006			1979 to 2006
Croatia	HIC	1992 to 2006	1992 to 2006		
Czech Republic	HIC	1993 to 2006	1993 to 2006		
Denmark	HIC	1891 to 2005		1891 to 2005	1945 to 1993
Djibouti	LIC	1979 to 2004			1979 to 2004
Dominican Republic	MIC	1975 to 2006			1975 to 2006
Ecuador	MIC	1973 to 2006	1973 to 1978		1979 to 2006
Egypt	MIC	1975 to 2006			1975 to 2006
El Salvador	MIC	1972 to 2000	1972 to 1977		1978 to 2000
Equatorial Guinea	HIC	1983 to 2004			1983 to 2004

Country	Country Group	Total Coverage	GFS Coverage	MIT Coverage	TPD Coverage
Estonia	HIC	1993 to 2001	1993 to 2001		
Ethiopia	LIC	1978 to 2005			1978 to 2005
Finland	HIC	1883 to 2005		1883 to 1993	1994 to 2005
France	HIC	1847 to 2005		1847 to 1974	1975 to 2005
Gabon	MIC	1975 to 2004			1975 to 2004
Gambia	LIC	1972 to 2000	1972 to 1976		1977 to 2000
Georgia	MIC	2001 to 2006	2001 to 2006		
Germany	HIC	1950 to 2005		1950 to 1993	1994 to 2005
Ghana	LIC	1978 to 2005			1978 to 2005
Greece	HIC	1928 to 2004		1928 to 1986	1987 to 2004
Guatemala	MIC	1972 to 2004	1972 to 1977		1978 to 2004
Guinea	LIC	1978 to 2006			1978 to 2006
Guinea to Bissau	LIC	1983 to 1988	1983 to 1988		
Haiti	LIC	1979 to 2006			1979 to 2006
Honduras	MIC	1975 to 2004			1975 to 2004
Hungary	MIC	1927 to 1999	1990 to 1999	1927 to 1940	
India	MIC	1948 to 2006		1948 to 1975	1976 to 2006
Indonesia	MIC	1951 to 2004		1951 to 1974	1975 to 2004
Iran	MIC	1959 to 2004		1959 to 1974	1975 to 2004
Ireland	HIC	1926 to 2005		1926 to 1985	1986 to 2005
Italy	HIC	1862 to 2004		1862 to 1974	1975 to 2004
Jamaica	MIC	1978 to 2000			1978 to 2000
Japan	HIC	1885 to 2004		1885 to 1993	1994 to 2004
Jordan	MIC	1978 to 2004			1978 to 2004
Kazakhstan	MIC	1997 to 1999	1997 to 1999		
Kenya	LIC	1977 to 2006			1977 to 2006
Korea, Rep.	HIC	1958 to 1998		1958 to 1974	1975 to 1998
Kuwait	HIC	1977 to 2001			1977 to 2001
Kyrgyz Republic	MIC	1994 to 2001	1994 to 2001		
Latvia	HIC	1996 to 2006	1996 to 2006		
Lebanon	MIC	1997 to 1999	1997 to 1999		
Lesotho	LIC	1975 to 2005			1975 to 2005
Lithuania	MIC	1993 to 2000	1993 to 2000		
Madagascar	LIC	1978 to 2000			1978 to 2000
Malawi	LIC	1977 to 2005			1977 to 2005
Malaysia	HIC	1975 to 2001			1975 to 2001
Mali	LIC	1975 to 2000			1975 to 2000
Mauritania	LIC	1975 to 2004			1975 to 2004
Mexico	MIC	1925 to 1993		1925 to 1993	
Moldova	MIC	1996 to 2006	1996 to 2006		

Country	Country Group	Total Coverage	GFS Coverage	MIT Coverage	TPD Coverage
Mongolia	LIC	1992 to 2003	1992 to 2003		
Morocco	MIC	1975 to 2006			1975 to 2006
Mozambique	LIC	1980 to 2006			1980 to 2006
Myanmar	LIC	1975 to 2000			1975 to 2000
Namibia	MIC	1985 to 2004			1985 to 2004
Nepal	LIC	1975 to 2006			1975 to 2006
Netherlands	HIC	1900 to 2005		1900 to 1988	1989 to 2005
New Zealand	HIC	1931 to 2005		1931 to 2005	
Nicaragua	LIC	1991 to 2006	1991 to 2006		
Niger	LIC	1976 to 2003			1976 to 2003
Nigeria	LIC	1979 to 2004			1979 to 2004
Norway	HIC	1880 to 2005		1880 to 1993	1994 to 2005
Oman	MIC	1972 to 2001	1972 to 2001		
Pakistan	MIC	1950 to 2005		1950 to 2005	
Panama	MIC	1975 to 2004			1975 to 2004
Paraguay	MIC	1975 to 2000			1975 to 2000
Peru	MIC	1942 to 2005		1942 to 1993	1994 to 2005
Philippines	MIC	1946 to 2005		1946 to 2005	
Poland	MIC	1994 to 2000	1994 to 2000		
Portugal	HIC	1950 to 2003		1950 to 1987	1988 to 2003
Qatar	HIC	2004 to 2006	2004 to 2006		
Romania	MIC	1990 to 2001	1990 to 2001		
Rwanda	LIC	1979 to 2006			1979 to 2006
Sao Tome	LIC	1981 to 2004			1981 to 2004
Senegal	LIC	1979 to 2003			1979 to 2003
Sierra Leone	LIC	1978 to 2005			1978 to 2005
Singapore	HIC	1975 to 2002			1975 to 2002
Slovak Republic	HIC	1996 to 2002	1996 to 2002		
Slovenia	HIC	1992 to 2006	1992 to 2006		
South Africa	MIC	1911 to 2006		1911 to 1974	1975 to 2006
Spain	HIC	1901 to 2005		1901 to 1985	1986 to 2005
Sri Lanka	MIC	1975 to 2005			1975 to 2005
Swaziland	MIC	1972 to 2006	1972 to 1978		1979 to 2006
Sweden	HIC	1881 to 2005		1881 to 1993	1994 to 2005
Switzerland	HIC	1930 to 2005		1930 to 1993	1994 to 2005
Syria	MIC	1975 to 2006			1975 to 2006
Tajikistan	LIC	1998 to 2004	1998 to 2004		
Tanzania	LIC	1980 to 2005			1980 to 2005
Thailand	MIC	1946 to 2003		1946 to 2003	
Togo	LIC	1978 to 2006			1978 to 2006

Country	Country Group	Total Coverage	GFS Coverage	MIT Coverage	TPD Coverage
Trinidad	HIC	1976 to 2004			1976 to 2004
Tunisia	MIC	1990 to 2006	1990 to 2006		
Turkey	MIC	1949 to 2001		1949 to 2001	
Uganda	LIC	1978 to 2006			1978 to 2006
Ukraine	MIC	1999 to 2006	1999 to 2006		
United Kingdom	HIC	1830 to 2005		1830 to 1930	1975 to 2005
United States	HIC	1792 to 2005		1792 to 1997	1998 to 2005
Uruguay	HIC	1955 to 2006		1955 to 1992	1993 to 2006
Venezuela	HIC	1950 to 2005		1950 to 1992	1993 to 2005
Yemen	MIC	1990 to 1999	1990 to 1999		
Zambia	LIC	1975 to 2006			1975 to 2006
Zimbabwe	LIC	1976 to 2004			1976 to 2004

## 2 Additional material for section 2

Table 2: Evolution of tax ratios, tax structures and GDP over time, for 8 HICs (Mitchell data only)

	(1)	(2)	(3)
	Total tax	Trade tax	GDP
1890-1899	8.8	1.9	2110.3
1910-1919	11.2	1.4	2979.7
1930-1939	15.9	1.5	3979.5
1950-1959	19.2	1.1	6269.6
1970-1979	24.1	0.5	12936.4
1990-1999	26.0	0.5	19498.6

*Notes:* Each value is a mean over a decade. The table presents descriptive statistics on total and trade tax revenues as a share of GDP, GDP per capita and tariff rates. The sample consists of the 8 countries that are high-income countries in 2006 for which data is available from the 1880s to the 1990s in Mitchell (2007). Each country is given equal weight in the mean. See the text for a description of the data and the country income groups.



Table 3: Evolution of tax ratios, tax structures and GDP since 1970 by level of development in 2006, fixed sample of countries, Baunsgaard and Keen (2010) data only

	HICs					MICs					LICs				
	(1) Total tax	(2) Trade tax	(3) GDP	(4) AVE	(5) Tariff	(6) Total tax	(7) Trade tax	(8) GDP	(9) AVE	(10) Tariff	(11) Total tax	(12) Trade tax	(13) GDP	(14) AVE	(15) Tariff
1970-1979	22.5	1.6	11016.0	7.1		16.1	4.5	3219.3	16.4		15.6	5.9	970.3	18.6	
1980-1989	25.0	1.1	12741.4	5.0		15.4	3.7	3344.6	14.3		15.1	5.3	946.5	16.7	
1990-1999	28.4	0.6	15430.2	3.6	5.9	14.8	2.8	3713.9	14.5	33.8	13.7	3.9	877.0	19.1	28.0
2000-2006	31.0	0.4	18272.8	1.2	4.7	15.2	2.3	4100.4	6.8	14.4	14.9	3.4	928.3	15.0	17.0

Notes: Each value is a mean over a decade. The table presents descriptive statistics on total and trade tax revenues as a share of GDP, GDP per capita and tariff rates. The sample consists of the 84 countries for which data from Baunsgaard and Keen (2010) is available in each decade from 1970 to 2006: 29 HICs, 26 MICs and 29 LICs. Each country is given equal weight in the mean. See the text for a description of the data and the country income groups.

### 3 Additional material for section 4

Table 5: List of episodes

Country	Fall in imports	Fall in tariff	Fall in AVE	WW 2008 date	Episode start
Albania	0	1	1	1992	1997
Algeria	0	1	1	NA	1995
Argentina	1	NA	1	NA	1935
Argentina	0	NA	1	1991	1984
Austria	0	NA	1	1960	1963
Bangladesh	0	NA	1	1996	1978
Belgium	0	NA	1	NA	1934
Belgium	0	NA	1	1959	1962
Benin	0	NA	NA	1990	1979
Botswana	1	NA	1	1979	1981
Botswana	0	NA	1	NA	1992
Brazil	0	NA	1	NA	1906
Brazil	1	NA	1	NA	1933
Bulgaria	0	NA	NA	NA	1924
Bulgaria	0	1	1	1991	1994
Burkina Faso	0	NA	1	1998	1977
Burundi	0	NA	NA	NA	1978
Burundi	0	NA	1	1999	1987
Cameroon	0	NA	1	1993	1976
Canada	1	NA	1	NA	1926
Central African Republic	0	NA	0	NA	1979
Chad	0	0	1	NA	1999
Chile	NA	NA	1	NA	1927
Chile	NA	NA	1	NA	1939
Chile	1	NA	1	1976	1975
Chile	0	NA	1	NA	1985
China	0	NA	1	NA	1985
Colombia	0	NA	1	1986	1987
Comoros	1	NA	1	NA	1983
Congo, Rep.	0	1	1	NA	1992
Costa Rica	0	NA	1	1986	1983
Cote d'Ivoire	1	NA	0	1994	1979
Croatia	0	1	1	NA	1996
Czech Republic	0	1	1	1991	1993
Denmark	0	NA	1	NA	1897
Djibouti	0	NA	NA	NA	1984

Country	Fall in imports	Fall in tariff	Fall in AVE	WW 2008 date	Episode start
Dominican Republic	1	NA	1	NA	1975
Dominican Republic	1	1	1	1992	1999
Ecuador	1	NA	1	1991	1973
Egypt	1	NA	1	NA	1979
Egypt	0	1	1	1995	1993
El Salvador	1	NA	NA	NA	1977
El Salvador	0	NA	NA	1989	1985
Equatorial Guinea	0	NA	1	NA	1985
Ethiopia	0	NA	1	1996	1978
Finland	0	NA	NA	NA	1908
Finland	0	NA	1	1960	1957
France	0	NA	1	1959	1960
Gabon	1	NA	1	NA	1985
Gambia	1	NA	1	1985	1985
Ghana	1	NA	1	1985	1978
Greece	0	NA	1	1959	1968
Guatemala	1	NA	1	1988	1978
Guinea	NA	NA	NA	1986	1978
Guinea-Bissau	0	NA	NA	1987	1983
Haiti	0	NA	0	NA	1980
Honduras	0	1	1	1991	1991
Hungary	1	NA	NA	NA	1927
Hungary	0	1	1	1990	1994
India	0	NA	1	NA	1987
Indonesia	0	NA	1	NA	1951
Indonesia	0	NA	1	1970	1970
Iran	1	NA	NA	NA	1975
Ireland	NA	NA	NA	NA	1934
Ireland	0	NA	1	NA	1956
Ireland	0	NA	NA	1966	1967
Italy	1	NA	1	NA	1933
Jordan	1	NA	1	1965	1978
Jordan	0	1	1	NA	1993
Kenya	1	NA	0	NA	1980
Kenya	1	1	1	1993	1995
Korea, Rep.	0	NA	1	1968	1979
Lebanon	1	NA	NA	NA	1997
Lesotho	0	NA	1	NA	1983
Lesotho	0	NA	NA	NA	1994
Madagascar	1	NA	1	NA	1978

Country	Fall in imports	Fall in tariff	Fall in AVE	WW 2008 date	Episode start
Madagascar	0	NA	1	1996	1987
Malawi	0	1	1	NA	1995
Malaysia	0	NA	1	1963	1979
Mali	0	NA	1	1988	1975
Mauritania	1	NA	NA	1995	1984
Mexico	0	NA	1	1986	1981
Mongolia	0	NA	1	NA	1992
Morocco	0	1	1	1984	1993
Mozambique	1	NA	NA	NA	1980
Mozambique	0	0	NA	1995	1989
Myanmar	NA	NA	1	NA	1981
Namibia	0	NA	NA	NA	1985
Namibia	0	NA	1	NA	1991
Netherlands	0	NA	1	NA	1936
Netherlands	0	NA	1	1959	1966
New Zealand	0	NA	0	NA	1945
New Zealand	0	NA	1	1986	1968
Nicaragua	1	1	1	1991	1991
Niger	1	NA	NA	1994	1980
Norway	0	NA	1	NA	1909
Norway	0	NA	1	NA	1957
Pakistan	0	NA	1	NA	1950
Pakistan	0	NA	1	2001	1974
Panama	1	NA	1	1996	1975
Paraguay	NA	NA	1	1989	1978
Peru	0	NA	1	NA	1952
Peru	1	NA	1	1991	1979
Philippines	1	NA	0	NA	1974
Philippines	0	1	1	1988	1993
Poland	0	1	1	1990	1994
Portugal	0	NA	1	NA	1961
Portugal	0	1	1	NA	1988
Rwanda	1	NA	NA	NA	1979
Rwanda	0	NA	NA	NA	1986
Sao Tome and Principe	NA	NA	NA	NA	1981
Senegal	0	NA	1	NA	1979
Senegal	0	1	1	NA	1991
Sierra Leone	1	NA	1	NA	1978
Sierra Leone	0	NA	0	2001	1986
Singapore	0	NA	1	1965	1977

Country	Fall in imports	Fall in tariff	Fall in AVE	WW 2008 date	Episode start
Slovak Republic	0	1	1	1991	1996
Slovenia	0	1	1	1991	1992
Sri Lanka	0	NA	1	1991	1979
Swaziland	1	NA	1	NA	1980
Sweden	0	NA	1	NA	1899
Switzerland	0	NA	1	NA	1934
Switzerland	0	NA	1	NA	1963
Syria	1	NA	1	NA	1975
Tanzania	NA	NA	NA	NA	1980
Tanzania	1	1	1	1995	1994
Thailand	0	NA	1	NA	1964
Thailand	0	1	1	NA	1990
Togo	1	NA	0	NA	1978
Trinidad and Tobago	1	NA	NA	1992	1980
Tunisia	1	1	1	1989	1990
Turkey	0	NA	1	1989	1976
Uganda	0	NA	1	1988	1984
United Kingdom	0	NA	1	NA	1842
United Kingdom	0	NA	1	NA	1851
United States	1	NA	1	NA	1828
Venezuela	0	NA	1	1996	1958
Yemen	1	NA	1	NA	1993
Zambia	0	1	1	1993	1991
Zimbabwe	0	1	1	NA	1992

Table 4: Average GDP growth rate before and after an episode of trade liberalization

	1972-1969				1970-2006				
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
Growth rate before episode: 1-year average	4.3 (5.1)	3.1 (4.1)	5.1 (8.0)	2.7 (3.5)	3.2 (3.2)	4.8 (5.5)	4.6 (.)	4.5 (5.1)	5.1 (6.0)
Growth rate after episode: 1-year average	4.8 (4.7)	4.8 (4.5)	6.7 (2.4)	5.0 (5.0)	3.5 (3.7)	4.8 (4.8)	4.1 (1.2)	5.0 (4.5)	4.6 (5.2)
Change in growth rate (1 year)	0.4 (7.0)	1.8 (7.0)	1.6 (9.9)	2.0 (7.6)	1.1 (2.8)	-0.3 (7.0)	-0.2 (.)	0.0 (6.7)	-0.6 (7.4)
Growth rate before episode: 3-year average	4.0 (4.3)	3.5 (2.9)	6.4 (3.3)	3.2 (2.5)	2.4 (3.0)	4.3 (4.8)	7.6 (.)	3.6 (4.5)	4.8 (5.0)
Growth rate after episode: 3-year average	3.9 (3.2)	4.3 (2.6)	3.9 (2.1)	3.8 (1.9)	5.7 (3.8)	3.8 (3.4)	1.9 (4.3)	4.1 (3.4)	3.6 (3.4)
Change in growth rate (3 years)	-0.1 (4.6)	0.6 (3.1)	-2.6 (5.1)	0.6 (2.1)	2.6 (3.3)	-0.4 (5.1)	-10.7 (.)	0.1 (4.6)	-0.6 (5.4)
Growth rate before episode: 5-year average	4.1 (4.0)	3.7 (2.6)	5.7 (2.4)	3.4 (2.4)	3.7 (2.9)	4.2 (4.5)	7.6 (.)	3.7 (4.1)	4.7 (4.9)
Growth rate after episode: 5-year average	3.5 (3.1)	3.7 (2.6)	4.2 (1.5)	3.2 (2.8)	5.0 (2.1)	3.4 (3.2)	1.7 (2.9)	3.7 (3.2)	3.3 (3.3)
Change in growth rate (5 years)	-0.4 (4.4)	0.2 (3.1)	-1.5 (3.7)	0.1 (3.2)	1.4 (1.9)	-0.6 (4.9)	-9.1 (.)	-0.2 (4.1)	-0.7 (5.5)
Growth rate before episode: 10-year average	4.2 (3.7)	3.5 (2.0)	5.5 (2.3)	3.2 (1.9)	3.3 (1.6)	4.5 (4.3)	7.6 (.)	3.9 (3.8)	4.9 (4.8)
Growth rate after episode: 10-year average	3.4 (2.4)	3.4 (2.0)	3.9 (0.7)	3.3 (1.9)	3.6 (2.5)	3.5 (2.6)	1.7 (3.1)	3.9 (2.0)	3.2 (2.9)
Change in growth rate (10 years)	-0.5 (4.0)	0.2 (1.6)	-1.7 (2.1)	0.5 (1.1)	0.1 (2.3)	-0.8 (4.7)	-9.4 (.)	-0.0 (3.5)	-1.3 (5.3)
Number of episodes	140	38	4	25	9	102	3	44	55
Number of countries	110	30	4	22	8	85	3	39	46

*Notes:* Mean (standard error). The table presents descriptive statistics on average growth rate for all episodes of decreases in trade tax revenues. The number of observations refers to the number of observations in our data set for the period and country income group under consideration. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1972-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. See the text for a description of the dataset.

Table 6: Episodes of decreases in trade tax revenues, including decreases in imports

	1972-1969				1970-2006				
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
Size of the episode (GDP points)	3.2 (2.3)	2.3 (1.3)	1.9 (0.9)	2.4 (1.4)	2.3 (1.1)	3.5 (2.5)	2.1 (1.3)	3.1 (2.2)	3.8 (2.7)
Length of the episode (years)	12 (6)	14 (7)	17 (8)	15 (7)	12 (5)	11 (5)	13 (3)	10 (4)	12 (6)
Total tax revenues (% GDP)	16.9 (7.1)	14.7 (6.8)	19.7 (8.2)	15.2 (6.8)	11.1 (4.6)	17.7 (7.0)	24.7 (10.1)	18.2 (6.7)	16.9 (7.0)
Trade tax revenues (% GDP)	5.5 (4.0)	3.8 (1.6)	3.0 (0.9)	3.7 (1.8)	4.2 (1.4)	6.1 (4.5)	2.6 (1.2)	5.4 (3.6)	6.8 (5.0)
% Pre-empted episodes	6.5 (24.8)	6.5 (25.0)	25.0 (50.0)	4.8 (21.8)	0.0 (0.0)	6.6 (25.0)	100.0 (.)	3.6 (18.9)	6.3 (24.6)
Decrease in tariffs (percentage points)	7.2 (9.9)	9.0 (8.9)	7.4 (5.7)	8.0 (7.6)	14.9 (15.5)	6.4 (10.3)	2.4 (.)	9.5 (7.3)	3.2 (12.1)
Number of episodes	140	38	4	25	9	102	3	44	55
Number of countries	110	30	4	22	8	85	3	39	46
Number of observations	5206	1862	178	1152	532	3344	927	1224	1193

*Notes:* Mean (standard error). The table presents descriptive statistics on our sample of episodes of decrease in trade tax revenues defined by a 1 GDP points fall in trade tax revenues, including episodes during which imports as a share of GDP decreases. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1972-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country's income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 8.25. See the text for a description of the dataset and the method used to construct episodes.

Table 7: Episodes of decreases in trade tax revenues, using a total trade criteria

	1972-1969					1970-2006			
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
Size of the episode (GDP points)	3.0 (2.1)	2.3 (1.4)	1.5 (0.3)	2.5 (1.5)	2.0 (0.9)	3.3 (2.3)	2.4 (1.7)	3.0 (2.1)	3.6 (2.5)
Length of the episode (years)	12 (6)	14 (7)	18 (10)	15 (7)	10 (3)	12 (6)	15 (1)	10 (5)	13 (7)
Total tax revenues (% GDP)	16.8 (6.8)	15.4 (6.6)	18.9 (9.8)	15.4 (6.9)	13.5 (3.0)	17.4 (6.8)	20.3 (9.2)	19.2 (6.2)	16.1 (7.0)
Trade tax revenues (% GDP)	5.2 (4.0)	3.9 (1.6)	2.6 (0.4)	4.0 (1.8)	4.2 (0.9)	5.7 (4.6)	2.4 (1.7)	4.9 (2.9)	6.5 (5.4)
% Pre-empted episodes	7.0 (25.8)	7.7 (27.2)	33.3 (57.7)	5.0 (22.4)	0.0 (0.0)	6.7 (25.2)	.	4.8 (21.8)	8.3 (28.2)
Decrease in tariffs (percentage points)	7.5 (10.0)	7.4 (7.4)	7.0 (6.9)	7.6 (8.0)	6.5 (.)	7.5 (11.2)	2.4 (.)	11.0 (8.0)	4.4 (13.1)
Number of episodes	99	29	3	21	5	70	2	28	40
Number of countries	85	22	3	18	5	65	2	27	37
Number of observations	5206	1862	178	1152	532	3344	927	1224	1193

*Notes:* Mean (standard error). The table presents descriptive statistics on our sample of episodes of decrease in trade tax revenues defined by a 1 GDP points fall in trade tax revenues and no decrease in total trade (the sum of exports and imports as a share of GDP). Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1972-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country's income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 8.25. See the text for a description of the dataset and the method used to construct episodes.



Table 8: Episodes of decreases in trade tax revenues, excluding cases with no import data

	1792-1969				1970-2006				
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
Size of the episode (GDP points)	2.9 (1.9)	2.5 (1.4)	1.9 (0.9)	2.7 (1.6)	2.4 (1.2)	3.1 (2.1)	2.4 (1.7)	2.6 (1.7)	3.5 (2.3)
Length of the episode (years)	13 (6)	15 (7)	17 (8)	17 (7)	10 (4)	12 (6)	15 (1)	10 (5)	13 (7)
Total tax revenues (% GDP)	17.0 (6.8)	15.6 (6.6)	19.7 (8.2)	15.9 (6.9)	12.5 (3.7)	17.6 (6.9)	20.3 (9.2)	19.6 (6.0)	15.8 (7.1)
Trade tax revenues (% GDP)	5.0 (4.0)	3.9 (1.7)	3.0 (0.9)	3.8 (1.8)	4.6 (1.4)	5.6 (4.6)	2.4 (1.7)	4.6 (2.7)	6.6 (5.7)
% Pre-empted episodes	6.0 (23.9)	4.0 (20.0)	25.0 (50.0)	0.0 (0.0)	0.0 (0.0)	7.1 (26.1)	.	5.0 (22.4)	9.1 (29.4)
Decrease in tariffs (percentage points)	8.5 (9.7)	8.2 (8.5)	7.4 (5.7)	7.9 (7.8)	10.8 (16.1)	8.7 (10.5)	2.4 (.)	10.2 (7.6)	7.3 (13.6)
Number of episodes	91	29	4	18	7	62	2	27	33
Number of countries	78	23	4	16	7	58	2	26	30
Number of observations	5206	1862	178	1152	532	3344	927	1224	1193

*Notes:* Mean (standard error). The table presents descriptive statistics on our sample of episodes of decrease in trade tax revenues defined by a 1 GDP points fall in trade tax revenues and an increase in imports as a share of GDP. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country's income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 8.25. See the text for a description of the dataset and the method used to construct episodes.

Table 9: Episodes of decreases in trade tax revenues, non pre-empted episodes only

	1792-1969				1970-2006				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>Entire Sample</b>	All countries	HICs	MICs	LICs	All countries	HICs	MICs	LICs	
Size of the episode (GDP points)	2.9 (2.0)	2.5 (1.4)	2.2 (0.9)	2.5 (1.5)	2.4 (1.2)	3.2 (2.2)	2.4 (1.7)	2.6 (1.7)	3.7 (2.5)
Length of the episode (years)	13 (7)	15 (7)	19 (8)	16 (7)	10 (4)	12 (6)	15 (1)	10 (5)	13 (7)
Total tax revenues (% GDP)	16.7 (6.9)	14.7 (6.5)	17.7 (8.7)	15.1 (6.9)	12.5 (3.7)	17.6 (7.0)	20.3 (9.2)	19.3 (6.2)	16.1 (7.3)
Trade tax revenues (% GDP)	5.1 (4.0)	4.0 (1.6)	3.3 (0.9)	3.8 (1.7)	4.6 (1.4)	5.7 (4.7)	2.4 (1.7)	4.6 (2.7)	6.7 (5.6)
Decrease in tariffs (percentage points)	7.7 (10.2)	7.8 (8.8)	5.9 (6.0)	7.6 (8.0)	10.8 (16.1)	7.6 (11.1)	2.4 (.)	10.1 (7.4)	5.1 (14.2)
Number of episodes	94	30	3	20	7	64	2	27	35
Number of countries	83	24	3	17	7	60	2	26	32

*Notes:* Mean (standard error). The table presents descriptive statistics on our sample of 94 episodes of decrease in trade tax revenues which the data suggests have not been pre-empted. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country's income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 6.25. See the text for a description of the dataset and the methods used to construct episodes and to determine whether they were pre-empted.

Table 10: Episodes of decreases in trade tax revenues, 2 GDP points definition

	1972-1969					1970-2006			
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
Size of the episode (GDP points)	3.8 (2.0)	3.4 (1.4)	3.2 (.)	3.5 (1.6)	3.0 (1.1)	4.0 (2.2)	3.6 (.)	3.5 (1.9)	4.2 (2.4)
Length of the episode (years)	13 (6)	15 (7)	13 (.)	17 (8)	11 (4)	13 (6)	14 (.)	11 (5)	14 (7)
Total tax revenues (% GDP)	17.7 (7.1)	15.4 (6.8)	22.0 (.)	16.0 (7.3)	12.3 (5.0)	18.4 (7.2)	13.8 (.)	21.0 (5.4)	17.2 (7.9)
Trade tax revenues (% GDP)	6.1 (4.6)	4.5 (1.4)	4.3 (.)	4.5 (1.4)	4.7 (1.7)	6.6 (5.2)	3.6 (.)	5.1 (2.0)	7.6 (6.2)
Number of episodes	57	15	1	10	4	42	1	15	26
Number of countries	53	15	1	10	4	39	1	15	23
Number of observations	5206	1862	178	1152	532	3344	927	1224	1193

*Notes:* Mean (standard error). The table presents descriptive statistics on our sample of episodes of decrease in trade tax revenues defined by a 2 GDP points fall in trade tax revenues. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country's income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 8.25. See the text for a description of the dataset and the method used to construct episodes.

Table 11: Episodes of decreases in trade tax revenues, 8.25 HP filter definition

	1792-1969					1970-2006			
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
Size of the episode (GDP points)	2.9 (1.9)	2.4 (1.4)	1.9 (0.9)	2.5 (1.5)	2.3 (1.2)	3.1 (2.1)	2.4 (1.7)	2.8 (1.7)	3.5 (2.4)
Length of the episode (years)	13 (6)	15 (7)	17 (8)	16 (8)	10 (3)	12 (6)	15 (1)	11 (5)	13 (6)
Total tax revenues (% GDP)	16.6 (6.8)	15.0 (6.6)	19.6 (8.1)	15.0 (6.9)	12.5 (3.7)	17.3 (6.9)	20.4 (9.0)	18.7 (6.0)	16.1 (7.4)
Trade tax revenues (% GDP)	5.0 (3.9)	3.9 (1.6)	3.0 (0.9)	3.8 (1.7)	4.6 (1.4)	5.5 (4.6)	2.4 (1.7)	4.4 (2.4)	6.5 (5.7)
Number of episodes	94	31	4	20	7	63	2	27	34
Number of countries	81	24	4	17	7	60	2	27	31
Number of observations	5206	1862	178	1152	532	3344	927	1224	1193

*Notes:* Mean (standard error). The table presents descriptive statistics on our sample of episodes of decrease in trade tax revenues defined on data smoothed using a HP filter with a smoothing parameter of 8.25. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country's income group at the start of the episode. See the text for a description of the dataset and the method used to construct episodes.

Table 12: Episodes of decreases in trade tax revenues, 10 HP filter definition

	1972-1969					1970-2006			
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
Size of the episode (GDP points)	3.0 (1.9)	2.4 (1.4)	1.9 (0.9)	2.5 (1.5)	2.5 (1.1)	3.3 (2.1)	2.4 (1.8)	2.9 (1.7)	3.7 (2.4)
Length of the episode (years)	14 (6)	15 (7)	17 (8)	16 (8)	11 (3)	13 (6)	15 (1)	12 (6)	14 (6)
Total tax revenues (% GDP)	16.7 (6.9)	15.1 (6.6)	19.6 (8.1)	14.9 (6.8)	12.7 (3.9)	17.5 (6.9)	20.5 (8.9)	18.7 (5.9)	16.2 (7.5)
Trade tax revenues (% GDP)	5.0 (4.0)	3.8 (1.6)	3.0 (0.9)	3.8 (1.7)	4.5 (1.5)	5.6 (4.6)	2.4 (1.7)	4.5 (2.4)	6.8 (5.8)
Number of episodes	90	30	4	20	6	60	2	27	31
Number of countries	78	24	4	17	6	57	2	27	28
Number of observations	5206	1862	178	1152	532	3344	927	1224	1193

*Notes:* Mean (standard error). The table presents descriptive statistics on our sample of episodes of decrease in trade tax revenues defined on data smoothed using a HP filter with a smoothing parameter of 10. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country's income group at the start of the episode. See the text for a description of the dataset and the method used to construct episodes.

Table 13: Episodes of decreases in trade tax revenues, Christiano-Fitzgerald filter definition

	1972-1969					1970-2006			
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
Size of the episode (GDP points)	2.7 (1.9)	2.0 (1.2)	2.0 (0.8)	2.0 (1.3)	1.8 (0.7)	3.0 (2.1)	3.4 (.)	3.0 (1.8)	3.0 (2.3)
Length of the episode (years)	10 (5)	11 (6)	16 (9)	10 (5)	9 (3)	9 (4)	13 (.)	9 (4)	9 (5)
Total tax revenues (% GDP)	16.6 (6.7)	14.9 (7.0)	20.7 (7.5)	14.5 (7.2)	12.0 (3.8)	17.5 (6.5)	15.9 (.)	19.3 (5.4)	16.2 (6.9)
Trade tax revenues (% GDP)	4.9 (3.9)	3.8 (1.7)	3.3 (0.8)	3.9 (2.0)	3.6 (1.3)	5.5 (4.5)	3.5 (.)	4.7 (2.5)	6.1 (5.5)
Number of episodes	111	37	5	25	7	74	1	30	43
Number of countries	87	27	5	20	6	64	1	29	35
Number of observations	5206	1862	178	1152	532	3344	927	1224	1193

*Notes:* Mean (standard error). The table presents descriptive statistics on our sample of episodes of decrease in trade tax revenues defined on data smoothed using the Christiano-Fitzgerald filter. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1972-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country's income group at the start of the episode. See the text for a description of the dataset and the method used to construct episodes.

Table 14: Episodes of decreases in trade tax revenues, tax revenues per capita definition

	1792-1969					1970-2006			
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
Size of the episode (GDP points)	91.9 (110.1)	74.5 (83.6)	140.1 (142.0)	81.3 (80.7)	25.7 (13.7)	99.5 (119.8)	78.1 (88.7)	171.0 (153.7)	40.9 (32.9)
Length of the episode (years)	12 (5)	12 (5)	17 (4)	12 (4)	12 (5)	12 (5)	10 (3)	10 (4)	14 (5)
Total tax revenues (pc)	1,177.2 (1,704.4)	694.9 (735.8)	2,002.1 (327.8)	656.6 (596.0)	130.4 (61.5)	1,390.6 (1,957.0)	3,965.3 (2,701.2)	1,051.0 (450.9)	185.4 (125.4)
Trade tax revenues (pc)	121.7 (121.7)	110.4 (118.3)	205.1 (186.5)	120.2 (117.1)	40.0 (21.3)	126.7 (124.0)	97.9 (89.2)	213.9 (145.6)	56.9 (42.6)
Number of episodes	75	23	3	14	6	52	12	20	20
Number of countries	68	20	3	13	5	50	12	19	20
Number of observations	5206	1862	178	1152	532	3344	927	1224	1193

*Notes:* Mean (standard error). The table presents descriptive statistics on our sample of episodes of decrease in trade tax revenues defined by a more than 50% fall in trade tax revenues per capita. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country's income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 6.25. See the text for a description of the dataset and the method used to construct episodes.

Table 15: The fiscal cost of trade liberalization, including decreases in imports

	1972-1969				1970-2006				
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
% Episodes with no fall in total tax revenues	47.1 (50.1)	55.3 (50.4)	50.0 (57.7)	64.0 (49.0)	33.3 (50.0)	44.1 (49.9)	100.0 (0.0)	47.7 (50.5)	38.2 (49.0)
% Episodes with no fiscal recovery	27.9 (45.0)	7.9 (27.3)	0.0 (0.0)	8.0 (27.7)	11.1 (33.3)	35.3 (48.0)	0.0 (0.0)	34.1 (47.9)	38.2 (49.0)
Actual recovery time (years)	5 (8)	7 (10)	6 (6)	4 (5)	16 (15)	4 (6)	1 (0)	4 (7)	5 (6)
Potential recovery time (years)	26.5 (20.6)	46.1 (29.8)	30.8 (6.5)	41.8 (21.2)	64.8 (46.6)	19.2 (7.7)	17.7 (5.5)	16.9 (8.3)	21.0 (6.9)
% Episodes with recovery under 5 years	49.3 (50.2)	56.8 (50.2)	50.0 (57.7)	66.7 (48.2)	33.3 (50.0)	46.5 (50.1)	100.0 (0.0)	48.8 (50.6)	41.8 (49.8)
% Episodes with recovery under 10 years	56.6 (49.8)	64.9 (48.4)	75.0 (50.0)	75.0 (44.2)	33.3 (50.0)	53.3 (50.2)	100.0 (0.0)	52.8 (50.6)	50.9 (50.5)
% Episodes with recovery under 20 years	66.7 (47.4)	84.4 (36.9)	100.0 (0.0)	95.2 (21.8)	42.9 (53.5)	55.1 (50.3)	100.0 (.)	60.0 (50.7)	51.5 (50.8)
Number of episodes	140	38	4	25	9	102	3	44	55
Number of countries	110	30	4	22	8	85	3	39	46

*Notes:* Mean (standard error). The table presents descriptive statistics on fiscal recovery for all episodes of decrease in trade tax revenues, including those during which imports as a share of GDP decrease. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 6.25. See the text for a description of the dataset and the methods used to construct episodes and to determine whether they were pre-empted.



Table 16: The fiscal cost of trade liberalization, total trade criteria

	1792-1969					1970-2006			
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
% Episodes with no fall in total tax revenues	55.6 (49.9)	69.0 (47.1)	66.7 (57.7)	71.4 (46.3)	60.0 (54.8)	50.0 (50.4)	100.0 (0.0)	60.7 (49.7)	40.0 (49.6)
% Episodes with no fiscal recovery	23.2 (42.4)	6.9 (25.8)	0.0 (0.0)	9.5 (30.1)	0.0 (0.0)	30.0 (46.2)	0.0 (0.0)	28.6 (46.0)	32.5 (47.4)
Actual recovery time (years)	4 (6)	4 (7)	4 (5)	3 (5)	9 (11)	4 (5)	1 (0)	2 (3)	5 (6)
Potential recovery time (years)	24.2 (16.7)	40.2 (21.5)	29.7 (7.5)	41.1 (21.1)	42.8 (29.5)	17.5 (7.5)	14.5 (0.7)	13.4 (5.9)	20.6 (7.3)
% Episodes with recovery under 5 years	58.2 (49.6)	71.4 (46.0)	66.7 (57.7)	75.0 (44.4)	60.0 (54.8)	52.9 (50.3)	100.0 (0.0)	60.7 (49.7)	45.0 (50.4)
% Episodes with recovery under 10 years	66.3 (47.5)	78.6 (41.8)	100.0 (0.0)	80.0 (41.0)	60.0 (54.8)	60.7 (49.3)	100.0 (0.0)	71.4 (46.3)	52.6 (50.6)
% Episodes with recovery under 20 years	76.0 (43.1)	91.7 (28.2)	100.0 (0.0)	94.4 (23.6)	66.7 (57.7)	61.5 (49.6)	.	100.0 (0.0)	54.5 (51.0)
Number of episodes	99	29	3	21	5	70	2	28	40
Number of countries	85	22	3	18	5	65	2	27	37

*Notes:* Mean (standard error). The table presents descriptive statistics on fiscal recovery for all episodes of decrease in trade tax revenues during which total trade (sum of exports and imports as a share of GDP) doesn't fall. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 6.25. See the text for a description of the dataset and the methods used to construct episodes and to determine whether they were pre-empted.

Table 17: The fiscal cost of trade liberalization, excluding cases with no import data

	1792-1969					1970-2006			
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
% Episodes with no fall in total tax revenues	53.8 (50.1)	62.1 (49.4)	50.0 (57.7)	72.2 (46.1)	42.9 (53.5)	50.0 (50.4)	100.0 (0.0)	55.6 (50.6)	42.4 (50.2)
% Episodes with no fiscal recovery	23.1 (42.4)	6.9 (25.8)	0.0 (0.0)	5.6 (23.6)	14.3 (37.8)	30.6 (46.5)	0.0 (0.0)	33.3 (48.0)	30.3 (46.7)
Actual recovery time (years)	4 (6)	5 (7)	6 (6)	4 (5)	10 (10)	4 (5)	1 (0)	2 (4)	5 (6)
Potential recovery time (years)	25.5 (18.4)	43.4 (22.0)	30.8 (6.5)	43.3 (20.9)	50.7 (29.1)	17.1 (7.2)	14.5 (0.7)	13.9 (5.7)	19.9 (7.4)
% Episodes with recovery under 5 years	56.0 (49.9)	62.1 (49.4)	50.0 (57.7)	72.2 (46.1)	42.9 (53.5)	53.2 (50.3)	100.0 (0.0)	55.6 (50.6)	48.5 (50.8)
% Episodes with recovery under 10 years	64.3 (48.2)	69.0 (47.1)	75.0 (50.0)	77.8 (42.8)	42.9 (53.5)	61.8 (49.0)	100.0 (0.0)	68.2 (47.7)	54.8 (50.6)
% Episodes with recovery under 20 years	76.1 (43.1)	88.0 (33.2)	100.0 (0.0)	93.8 (25.0)	60.0 (54.8)	61.9 (49.8)	. (.)	100.0 (0.0)	52.9 (51.4)
Number of episodes	91	29	4	18	7	62	2	27	33
Number of countries	78	23	4	16	7	58	2	26	30

*Notes:* Mean (standard error). The table presents descriptive statistics on fiscal recovery for all episodes of decrease in trade tax revenues during which imports as a share of GDP increase. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 6.25. See the text for a description of the dataset and the methods used to construct episodes and to determine whether they were pre-empted.

Table 18: The fiscal cost of trade liberalization, non pre-empted episodes only

	1972-1969							1970-2006		
	(1) Entire Sample	(2) All countries	(3) HIC	(4) MIC	(5) LIC	(6) All countries	(7) HIC	(8) MIC	(9) LIC	
% Episodes with no fall in total tax revenues	51.1 (50.3)	63.3 (49.0)	33.3 (57.7)	75.0 (44.4)	42.9 (53.5)	45.3 (50.2)	100.0 (0.0)	51.9 (50.9)	37.1 (49.0)	
% Episodes with no fiscal recovery	24.5 (43.2)	6.7 (25.4)	0.0 (0.0)	5.0 (22.4)	14.3 (37.8)	32.8 (47.3)	0.0 (0.0)	33.3 (48.0)	34.3 (48.2)	
Actual recovery time (years)	4 (6)	5 (7)	8 (6)	3 (5)	10 (10)	4 (5)	1 (0)	3 (5)	5 (6)	
Potential recovery time (years)	25.7 (18.1)	43.4 (21.7)	28.7 (6.1)	43.0 (19.9)	50.7 (29.1)	17.4 (7.0)	14.5 (0.7)	14.3 (5.9)	20.0 (7.0)	
% Episodes with recovery under 5 years	53.2 (50.2)	63.3 (49.0)	33.3 (57.7)	75.0 (44.4)	42.9 (53.5)	48.4 (50.4)	100.0 (0.0)	51.9 (50.9)	42.9 (50.2)	
% Episodes with recovery under 10 years	62.1 (48.8)	70.0 (46.6)	66.7 (57.7)	80.0 (41.0)	42.9 (53.5)	57.9 (49.8)	100.0 (0.0)	63.6 (49.2)	51.5 (50.8)	
% Episodes with recovery under 20 years	76.0 (43.1)	88.5 (32.6)	100.0 (0.0)	94.4 (23.6)	60.0 (54.8)	62.5 (49.5)	.	100.0 (0.0)	52.6 (51.3)	
Number of episodes	94	30	3	20	7	64	2	27	35	
Number of countries	83	24	3	17	7	60	2	26	32	

*Notes:* Mean (standard error). The table presents descriptive statistics on fiscal recovery for all episodes of decrease in trade tax revenues which the data suggests have not been pre-empted. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1972-1969 (respectively 1970-2006). HICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 6.25. See the text for a description of the dataset and the methods used to construct episodes and to determine whether they were pre-empted.

Table 19: The fiscal cost of trade liberalization, 2 GDP points definition

	1972-1969				1970-2006				
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
% Episodes with no fall in total tax revenues	50.9 (50.4)	60.0 (50.7)	0.0 (.)	80.0 (42.2)	25.0 (50.0)	47.6 (50.5)	100.0 (.)	53.3 (51.6)	42.3 (50.4)
% Episodes with no fiscal recovery	28.1 (45.3)	13.3 (35.2)	0.0 (.)	10.0 (31.6)	25.0 (50.0)	33.3 (47.7)	0.0 (.)	40.0 (50.7)	30.8 (47.1)
Actual recovery time (years)	4 (6)	5 (8)	13 (.)	1 (1)	13 (13)	3 (5)	1 (.)	2 (4)	4 (5)
Potential recovery time (years)	25.6 (17.1)	46.1 (20.6)	34.0 (.)	44.6 (19.0)	52.8 (28.2)	18.3 (6.8)	14.0 (.)	13.9 (5.9)	21.0 (6.1)
% Episodes with recovery under 5 years	54.4 (50.3)	60.0 (50.7)	0.0 (.)	80.0 (42.2)	25.0 (50.0)	52.4 (50.5)	100.0 (.)	53.3 (51.6)	50.0 (51.0)
% Episodes with recovery under 10 years	61.8 (49.0)	66.7 (48.8)	0.0 (.)	90.0 (31.6)	25.0 (50.0)	60.0 (49.6)	100.0 (.)	61.5 (50.6)	57.7 (50.4)
% Episodes with recovery under 20 years	71.0 (46.1)	76.9 (43.9)	100.0 (.)	88.9 (33.3)	33.3 (57.7)	66.7 (48.5)	. (.)	100.0 (0.0)	60.0 (50.7)
Number of episodes	57	15	1	10	4	42	1	15	26
Number of countries	53	15	1	10	4	39	1	15	23

Notes: Mean (standard error). The table presents descriptive statistics on fiscal recovery for all episodes of decrease in trade tax revenues defined by a more than 2 GDP points fall in trade tax revenues. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 6.25. See the text for a description of the dataset and the method used to construct episodes.

Table 20: The fiscal cost of trade liberalization, 8.25 HP filter definition

	1972-1969				1970-2006				
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
% Episodes with no fall in total tax revenues	54.3 (50.1)	61.3 (49.5)	50.0 (57.7)	75.0 (44.4)	28.6 (48.8)	50.8 (50.4)	100.0 (0.0)	51.9 (50.9)	47.1 (50.7)
% Episodes with no fiscal recovery	23.4 (42.6)	6.5 (25.0)	0.0 (0.0)	5.0 (22.4)	14.3 (37.8)	31.7 (46.9)	0.0 (0.0)	37.0 (49.2)	29.4 (46.2)
Actual recovery time (years)	5 (6)	6 (8)	6 (6)	3 (5)	13 (11)	4 (5)	1 (0)	3 (5)	5 (6)
Potential recovery time (years)	26.1 (18.1)	43.2 (21.4)	30.8 (6.5)	43.0 (19.9)	50.7 (29.1)	17.7 (7.2)	14.5 (0.7)	14.6 (6.6)	20.4 (6.9)
% Episodes with recovery under 5 years	56.4 (49.9)	64.5 (48.6)	50.0 (57.7)	80.0 (41.0)	28.6 (48.8)	52.4 (50.3)	100.0 (0.0)	51.9 (50.9)	50.0 (50.8)
% Episodes with recovery under 10 years	62.5 (48.7)	71.0 (46.1)	75.0 (50.0)	85.0 (36.6)	28.6 (48.8)	57.9 (49.8)	100.0 (0.0)	59.1 (50.3)	54.5 (50.6)
% Episodes with recovery under 20 years	74.0 (44.3)	85.2 (36.2)	100.0 (0.0)	94.4 (23.6)	40.0 (54.8)	60.9 (49.9)	.	80.0 (44.7)	55.6 (51.1)
Number of episodes	94	31	4	20	7	63	2	27	34
Number of countries	81	24	4	17	7	60	2	27	31

Notes: Mean (standard error). The table presents descriptive statistics on fiscal recovery for all episodes of decrease in trade tax revenues defined on data smoothed using a HP filter with a smoothing parameter of 8.25. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 8.25. See the text for a description of the dataset and the method used to construct episodes.

Table 21: The fiscal cost of trade liberalization, 10 HP filter definition

	1972-1969				1970-2006				
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
% Episodes with no fall in total tax revenues	53.3 (50.2)	63.3 (49.0)	50.0 (57.7)	75.0 (44.4)	33.3 (51.6)	48.3 (50.4)	100.0 (0.0)	51.9 (50.9)	41.9 (50.2)
% Episodes with no fiscal recovery	24.4 (43.2)	6.7 (25.4)	0.0 (0.0)	5.0 (22.4)	16.7 (40.8)	33.3 (47.5)	0.0 (0.0)	37.0 (49.2)	32.3 (47.5)
Actual recovery time (years)	4 (6)	5 (7)	6 (6)	3 (5)	11 (11)	4 (6)	1 (0)	3 (5)	5 (6)
Potential recovery time (years)	26.1 (17.1)	41.8 (20.2)	30.8 (6.5)	43.1 (20.0)	44.5 (26.3)	18.2 (7.2)	14.5 (0.7)	14.9 (6.8)	21.4 (6.4)
% Episodes with recovery under 5 years	55.6 (50.0)	66.7 (47.9)	50.0 (57.7)	80.0 (41.0)	33.3 (51.6)	50.0 (50.4)	100.0 (0.0)	51.9 (50.9)	45.2 (50.6)
% Episodes with recovery under 10 years	62.4 (48.7)	73.3 (45.0)	75.0 (50.0)	85.0 (36.6)	33.3 (51.6)	56.4 (50.1)	100.0 (0.0)	59.1 (50.3)	51.6 (50.8)
% Episodes with recovery under 20 years	74.0 (44.3)	88.5 (32.6)	100.0 (0.0)	94.4 (23.6)	50.0 (57.7)	58.3 (50.4)	.	66.7 (51.6)	55.6 (51.1)
Number of episodes	90	30	4	20	6	60	2	27	31
Number of countries	78	24	4	17	6	57	2	27	28

Notes: Mean (standard error). The table presents descriptive statistics on fiscal recovery for all episodes of decrease in trade tax revenues defined on data smoothed using a HP filter with a smoothing parameter of 10. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 10. See the text for a description of the dataset and the method used to construct episodes.

Table 22: The fiscal cost of trade liberalization, Christiano-Fitzgerald filter definition

	1972-1969				1970-2006				
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
% Episodes with no fall in total tax revenues	51.4 (50.2)	51.4 (50.7)	40.0 (54.8)	60.0 (50.0)	28.6 (48.8)	51.4 (50.3)	100.0 (.)	56.7 (50.4)	46.5 (50.5)
% Episodes with no fiscal recovery	20.7 (40.7)	8.1 (27.7)	0.0 (0.0)	12.0 (33.2)	0.0 (0.0)	27.0 (44.7)	0.0 (.)	26.7 (45.0)	27.9 (45.4)
Actual recovery time (years)	5 (8)	7 (10)	6 (5)	5 (11)	13 (10)	4 (5)	1 (.)	3 (5)	4 (5)
Potential recovery time (years)	24.6 (19.6)	42.2 (24.3)	29.2 (6.0)	44.3 (26.4)	44.1 (23.9)	15.8 (7.0)	13.0 (.)	13.0 (5.6)	17.9 (7.3)
% Episodes with recovery under 5 years	54.1 (50.1)	52.8 (50.6)	40.0 (54.8)	62.5 (49.5)	28.6 (48.8)	54.8 (50.1)	100.0 (.)	55.2 (50.6)	53.5 (50.5)
% Episodes with recovery under 10 years	67.0 (47.3)	71.4 (45.8)	80.0 (44.7)	78.3 (42.2)	42.9 (53.5)	64.5 (48.2)	100.0 (.)	73.9 (44.9)	57.9 (50.0)
% Episodes with recovery under 20 years	79.6 (40.7)	87.5 (33.6)	100.0 (0.0)	90.5 (30.1)	66.7 (51.6)	68.2 (47.7)	. (.)	100.0 (0.0)	61.1 (50.2)
Number of episodes	111	37	5	25	7	74	1	30	43
Number of countries	87	27	5	20	6	64	1	29	35

Notes: Mean (standard error). The table presents descriptive statistics on fiscal recovery for all episodes of decrease in trade tax revenues defined on data smoothed using the Christiano-Fitzgerald filter. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1972-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. Episodes are obtained on data smoothed using a Christiano-Fitzgerald filter. See the text for a description of the dataset and the method used to construct episodes.

Table 23: The fiscal cost of trade liberalization, tax revenues per capita definition

	1972-1969				1970-2006				
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
% Episodes with no fall in total tax revenues	62.7 (48.7)	69.6 (47.0)	66.7 (57.7)	78.6 (42.6)	50.0 (54.8)	59.6 (49.5)	91.7 (28.9)	55.0 (51.0)	45.0 (51.0)
% Episodes with no fiscal recovery	14.7 (35.6)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	21.2 (41.2)	8.3 (28.9)	15.0 (36.6)	35.0 (48.9)
Actual recovery time (years)	4 (6)	5 (7)	5 (6)	3 (4)	10 (11)	3 (5)	1 (0)	3 (3)	5 (8)
Potential recovery time (years)	26.8 (19.7)	48.5 (21.8)	31.3 (2.5)	49.9 (22.9)	53.7 (22.6)	17.2 (7.4)	15.0 (5.1)	15.4 (8.5)	20.4 (6.6)
% Episodes with recovery under 5 years	65.3 (47.9)	73.9 (44.9)	66.7 (57.7)	85.7 (36.3)	50.0 (54.8)	61.5 (49.1)	91.7 (28.9)	60.0 (50.3)	45.0 (51.0)
% Episodes with recovery under 10 years	74.6 (43.8)	78.3 (42.2)	66.7 (57.7)	85.7 (36.3)	66.7 (51.6)	72.7 (45.1)	90.9 (30.2)	85.7 (36.3)	52.6 (51.3)
% Episodes with recovery under 20 years	80.0 (40.5)	90.9 (29.4)	100.0 (0.0)	100.0 (0.0)	60.0 (54.8)	66.7 (48.5)	50.0 (70.7)	100.0 (0.0)	54.5 (52.2)
Number of episodes	75	23	3	14	6	52	12	20	20
Number of countries	68	20	3	13	5	50	12	19	20

Notes: Mean (standard error). The table presents descriptive statistics on fiscal recovery for all episodes of decrease in trade tax revenues defined by a more than 50% fall in trade tax revenues per capita. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1972-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. Episodes are obtained on tax data per capita smoothed using a HP filter with a smoothing parameter of 6.25. See the text for a description of the dataset and the method used to construct episodes.



Table 24: Government expenditures recovery, including decreases in imports

	1792-1969					1970-2006				
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs	
% Episodes with no fall in expenditures	55.7 (49.9)	68.4 (47.1)	75.0 (50.0)	76.0 (43.6)	44.4 (52.7)	51.0 (50.2)	66.7 (57.7)	47.7 (50.5)	52.7 (50.4)	
% Episodes with no expenditure recovery	23.57 (42.60)	2.63 (16.22)	0.00 (0.00)	4.00 (20.00)	0.00 (0.00)	31.37 (46.63)	0.00 (0.00)	43.18 (50.11)	23.64 (42.88)	
Actual recovery time (years)	4 (8)	6 (12)	3 (3)	4 (11)	12 (13)	3 (5)	3 (3)	3 (7)	3 (4)	
Potential recovery time (years)	26.5 (20.6)	46.1 (29.8)	30.8 (6.5)	41.8 (21.2)	64.8 (46.6)	19.2 (7.7)	17.7 (5.5)	16.9 (8.3)	21.0 (6.9)	
% Episodes with recovery under 5 years	59.4 (49.3)	73.0 (45.0)	75.0 (50.0)	83.3 (38.1)	44.4 (52.7)	54.5 (50.0)	66.7 (57.7)	51.2 (50.6)	56.4 (50.1)	
% Episodes with recovery under 10 years	67.4 (47.0)	78.4 (41.7)	100.0 (0.0)	83.3 (38.1)	55.6 (52.7)	63.0 (48.5)	100.0 (0.0)	52.8 (50.6)	67.9 (47.1)	
% Episodes with recovery under 20 years	79.0 (41.0)	87.5 (33.6)	100.0 (0.0)	95.2 (21.8)	57.1 (53.5)	73.5 (44.6)	100.0 (.)	60.0 (50.7)	78.8 (41.5)	
Number of episodes	140	38	4	25	9	102	3	44	55	
Number of countries	110	30	4	22	8	85	3	39	46	

*Notes:* Mean (standard error). The table presents descriptive statistics on expenditure recovery for all episodes of decrease in trade tax revenues, including those during which imports as a share of GDP decrease. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 6.25. See the text for a description of the dataset and the methods used to construct episodes and to determine whether they were pre-empted.

Table 25: Government expenditures recovery, total trade criteria

	1972-1969					1970-2006				
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs	
% Episodes with no fall in expenditures	61.6 (48.9)	65.5 (48.4)	66.7 (57.7)	71.4 (46.3)	40.0 (54.8)	60.0 (49.3)	50.0 (70.7)	57.1 (50.4)	62.5 (49.0)	
% Episodes with no expenditure recovery	19.19 (39.58)	3.45 (18.57)	0.00 (0.00)	4.76 (21.82)	0.00 (0.00)	25.71 (44.02)	0.00 (0.00)	32.14 (47.56)	22.50 (42.29)	
Actual recovery time (years)	4 (8)	6 (12)	3 (3)	5 (12)	13 (11)	2 (3)	4 (4)	2 (4)	2 (2)	
Potential recovery time (years)	24.2 (16.7)	40.2 (21.5)	29.7 (7.5)	41.1 (21.1)	42.8 (29.5)	17.5 (7.5)	14.5 (0.7)	13.4 (5.9)	20.6 (7.3)	
% Episodes with recovery under 5 years	65.3 (47.8)	71.4 (46.0)	66.7 (57.7)	80.0 (41.0)	40.0 (54.8)	62.9 (48.7)	50.0 (70.7)	60.7 (49.7)	65.0 (48.3)	
% Episodes with recovery under 10 years	73.0 (44.6)	75.0 (44.1)	100.0 (0.0)	80.0 (41.0)	40.0 (54.8)	72.1 (45.2)	100.0 (0.0)	66.7 (48.3)	73.7 (44.6)	
% Episodes with recovery under 20 years	84.0 (37.0)	87.5 (33.8)	100.0 (0.0)	94.4 (23.6)	33.3 (57.7)	80.8 (40.2)	.	100.0 (0.0)	77.3 (42.9)	
Number of episodes	99	29	3	21	5	70	2	28	40	
Number of countries	85	22	3	18	5	65	2	27	37	

Notes: Mean (standard error). The table presents descriptive statistics on expenditure recovery for all episodes of decrease in trade tax revenues during which total trade (the sum of exports and imports as a share of GDP) does not decrease. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1972-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 6.25. See the text for a description of the dataset and the methods used to construct episodes and to determine whether they were pre-empted.

Table 26: Government expenditures recovery, excluding cases with no import data

	1792-1969					1970-2006			
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
% Episodes with no fall in expenditures	59.3 (49.4)	62.1 (49.4)	75.0 (50.0)	66.7 (48.5)	42.9 (53.5)	58.1 (49.7)	50.0 (70.7)	51.9 (50.9)	63.6 (48.9)
% Episodes with no expenditure recovery	18.68 (39.19)	3.45 (18.57)	0.00 (0.00)	5.56 (23.57)	0.00 (0.00)	25.81 (44.11)	0.00 (0.00)	37.04 (49.21)	18.18 (39.17)
Actual recovery time (years)	4 (8)	6 (12)	3 (3)	6 (13)	10 (10)	2 (3)	4 (4)	2 (4)	2 (3)
Potential recovery time (years)	25.5 (18.4)	43.4 (22.0)	30.8 (6.5)	43.3 (20.9)	50.7 (29.1)	17.1 (7.2)	14.5 (0.7)	13.9 (5.7)	19.9 (7.4)
% Episodes with recovery under 5 years	63.7 (48.3)	69.0 (47.1)	75.0 (50.0)	77.8 (42.8)	42.9 (53.5)	61.3 (49.1)	50.0 (70.7)	55.6 (50.6)	66.7 (47.9)
% Episodes with recovery under 10 years	73.8 (44.2)	75.9 (43.5)	100.0 (0.0)	77.8 (42.8)	57.1 (53.5)	72.7 (44.9)	100.0 (0.0)	63.6 (49.2)	77.4 (42.5)
% Episodes with recovery under 20 years	87.0 (34.1)	88.0 (33.2)	100.0 (0.0)	93.8 (25.0)	60.0 (54.8)	85.7 (35.9)	.	100.0 (0.0)	82.4 (39.3)
Number of episodes	91	29	4	18	7	62	2	27	33
Number of countries	78	23	4	16	7	58	2	26	30

*Notes:* Mean (standard error). The table presents descriptive statistics on expenditure recovery for all episodes of decrease in trade tax revenues during which imports as a share of GDP increase. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 6.25. See the text for a description of the dataset and the methods used to construct episodes and to determine whether they were pre-empted.

Table 27: Government expenditures recovery, non pre-empted episodes only

	1792-1969					1970-2006				
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs	
% Episodes with no fall in expenditures	60.6 (49.1)	66.7 (47.9)	100.0 (0.0)	70.0 (47.0)	42.9 (53.5)	57.8 (49.8)	50.0 (70.7)	51.9 (50.9)	62.9 (49.0)	
% Episodes with no expenditure recovery	19.15 (39.56)	3.33 (18.26)	0.00 (0.00)	5.00 (22.36)	0.00 (0.00)	26.56 (44.52)	0.00 (0.00)	37.04 (49.21)	20.00 (40.58)	
Actual recovery time (years)	4 (8)	6 (12)	1 (0)	5 (13)	10 (10)	2 (3)	4 (4)	2 (4)	2 (3)	
Potential recovery time (years)	25.7 (18.1)	43.4 (21.7)	28.7 (6.1)	43.0 (19.9)	50.7 (29.1)	17.4 (7.0)	14.5 (0.7)	14.3 (5.9)	20.0 (7.0)	
% Episodes with recovery under 5 years	64.9 (48.0)	73.3 (45.0)	100.0 (0.0)	80.0 (41.0)	42.9 (53.5)	60.9 (49.2)	50.0 (70.7)	55.6 (50.6)	65.7 (48.2)	
% Episodes with recovery under 10 years	73.6 (44.4)	76.7 (43.0)	100.0 (0.0)	80.0 (41.0)	57.1 (53.5)	71.9 (45.3)	100.0 (0.0)	63.6 (49.2)	75.8 (43.5)	
% Episodes with recovery under 20 years	86.0 (35.1)	88.5 (32.6)	100.0 (0.0)	94.4 (23.6)	60.0 (54.8)	83.3 (38.1)	. (.)	100.0 (0.0)	78.9 (41.9)	
Number of episodes	94	30	3	20	7	64	2	27	35	
Number of countries	85	25	4	18	7	63	2	27	34	

*Notes:* Mean (standard error). The table presents descriptive statistics on fiscal recovery for all episodes of decrease in trade tax revenues which the data suggests have not been pre-empted. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 6.25. See the text for a description of the dataset and the methods used to construct episodes and to determine whether they were pre-empted.

## 4 Additional material for section 5

Table 28: Episodes of decreases in trade tax revenues that can be linked to trade agreements

	1792-1969				1970-2006				
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
Size of the episode (GDP points)	3.0 (2.0)	2.8 (1.5)	1.7 (.)	3.0 (1.7)	2.6 (0.8)	3.1 (2.2)	2.4 (1.7)	2.6 (1.6)	4.0 (2.8)
Length of the episode (years)	12 (6)	14 (8)	28 (.)	14 (7)	9 (1)	11 (5)	15 (1)	9 (3)	12 (8)
Total tax revenues (pc)	19.1 (7.7)	15.8 (7.4)	7.7 (.)	17.7 (7.1)	12.2 (8.4)	20.3 (7.5)	20.3 (9.2)	20.7 (5.9)	19.7 (9.9)
Trade tax revenues (pc)	5.6 (5.3)	4.3 (1.7)	3.1 (.)	4.6 (1.9)	3.8 (0.1)	6.1 (6.1)	2.4 (1.7)	4.6 (2.5)	9.1 (9.0)
Number of episodes	41	11	1	8	2	30	2	17	11
Number of countries	36	9	1	7	2	29	2	17	10
Number of observations	5206	1862	178	1152	532	3344	927	1224	1193

Notes: Mean (standard error). The table presents descriptive statistics on our sample of episodes that can be linked to a trade agreement. Total and trade tax revenues are measured at the start of the episode. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1792-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country's income group at the start of the episode. See the text for a description of the dataset and the method used to construct episodes.

Table 29: The fiscal cost of trade liberalization, episodes that can be linked to trade agreements only

	1972-1969					1970-2006			
	(1) Entire Sample	(2) All countries	(3) HICs	(4) MICs	(5) LICs	(6) All countries	(7) HICs	(8) MICs	(9) LICs
% Episodes with no fall in total tax revenues	48.8 (50.6)	54.5 (52.2)	0.0 (.)	75.0 (46.3)	0.0 (0.0)	46.7 (50.7)	100.0 (0.0)	41.2 (50.7)	45.5 (52.2)
% Episodes with no fiscal recovery	22.0 (41.9)	9.1 (30.2)	0.0 (.)	12.5 (35.4)	0.0 (0.0)	26.7 (45.0)	0.0 (0.0)	41.2 (50.7)	9.1 (30.2)
Actual recovery time (years)	4 (6)	6 (8)	9 (.)	2 (2)	20 (9)	4 (4)	1 (0)	4 (4)	4 (4)
Potential recovery time (years)	20.9 (16.3)	41.9 (17.6)	30.0 (.)	40.4 (19.4)	54.0 (1.4)	13.2 (5.5)	14.5 (0.7)	11.6 (4.4)	15.3 (6.8)
% Episodes with recovery under 5 years	55.0 (50.4)	60.0 (51.6)	0.0 (.)	85.7 (37.8)	0.0 (0.0)	53.3 (50.7)	100.0 (0.0)	41.2 (50.7)	63.6 (50.5)
% Episodes with recovery under 10 years	71.4 (45.8)	80.0 (42.2)	100.0 (.)	100.0 (0.0)	0.0 (0.0)	68.0 (47.6)	100.0 (0.0)	61.5 (50.6)	70.0 (48.3)
% Episodes with recovery under 20 years	92.3 (27.7)	90.0 (31.6)	100.0 (.)	100.0 (0.0)	50.0 (70.7)	100.0 (0.0)	. (.)	100.0 (.)	100.0 (0.0)
Number of episodes	41	11	1	8	2	30	2	17	11
Number of countries	36	9	1	7	2	29	2	17	10

*Notes:* Mean (standard error). The table presents descriptive statistics on fiscal recovery for all episodes that can be linked to a trade agreement. Column 1 presents results for the entire sample of episodes. In columns 2 to 5 (respectively 6 to 9), we present results considering only the period 1972-1969 (respectively 1970-2006). HICs (columns 3 and 7), MICs (columns 4 and 8) and LICs (columns 5 and 9) are defined using the country income group at the start of the episode. Episodes are obtained on data smoothed using a HP filter with a smoothing parameter of 10. See the text for a description of the dataset and the method used to construct episodes.

## References

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