DATA APPENDIX
"The Great Depression as a Savings glut"
FOR ONLINE PUBLICATION

We relied on the advice and expertise of many researchers to build this new database. Special thanks are owed to Flora Macher, Tamas Vonyo, Kiril Kossev, Peter Kugler, Joost Jonker, Ruben Peeters, Amaury de Vicq, Jan Tore Klovland, Karsten Gerdrup, Kim Abildgren, Stéphanie Collet, Ryland Thomas, Mark Billings, Masato Shizume, and Pierre-Cyrille Hautcoeur.

A1. Data sources for banks, savings institutions, and life insurance companies

For deposit data, our main sources are national statistical yearbooks (produced by central banks or national statistical agencies). When these sources are not available, we turn to the League of Nations *Statistical Yearbook*(s). By tapping directly into the original publications, we avoid transcription errors which are frequent in secondary sources (Mitchell (2013) uses similar sources, but we noticed several occasions where he had misreported the data). Whenever possible, we improve and correct these series with recent estimations. For life insurance policy data, we also use national statistical yearbooks (except for France, where we rely on a secondary source).

Data on the assets of savings institutions also are from national statistical yearbooks (with a few exceptions). For commercial banks assets, we rely on successive editions of the League of Nations "Memorandum on Commercial Banks", except for France where we use the data from Baubeau et al. (2021) and for Italy where we use data from Cotula et al. (1996).

The sections below give a country-by-country overview of the sources used for commercial banks and savings institutions deposits, for savings institutions assets, and for life insurance policies.

Commercial bank deposits

– Austria: *Statistische Handbuch für die Republik Osterreich* (various years). We add up savings account and current account deposits in the Aktien-banken (commercial banks) and the Landeshypothekenanstalten (public mortgage banks). Data for years 1920, 1921, 1922 and 1931 are not available. Million schillings.

– Belgium: LoN *Statistical Yearbook*(s) (various years). All deposits of less than one-month notice in commercial banks. Starting in 1935, banks operating mainly in the Belgian Congo are included. Data for years 1930 and 1934 are not available. Million francs.

– Bulgaria: LoN *Statistical Yearbook*(s) (various years). All deposits in popular banks, commercial banks and in the agricultural bank and central cooperative bank (state banks). Data before 1923 are not available. Million leva.

– Canada: *Canada Yearbook* (various years). Chartered banks. Sum of savings account and chequing account deposits.

– Denmark: *Statistisk Ärbog* (various years). Sum of current account and folio account deposits in commercial banks. Data for year 1920 is not available. Million kroner.

– Finland: *Suomen Tilastollinen Vuosikirja* (various years). All deposits in commercial banks. Million markkaa.

– France: Baubeau et al. (2021). Million francs.

– Germany: *Statistisches Jahrbuch für das Deutsche Reich* (various years). All deposits in commercial banks. Data before 1924 are not available. Million marks.

– Greece: Lazaretou (2014). Million drachmas.

– Hungary: Macher (2019). We add up deposit accounts in the issue banks and in the "other banks". Million pengos.

– Italy: Natoli et al. (2016). We add up deposits in the following banks: Societa ordinare di credito (SOC), Istituto di credito di diritto pubblico (ICDP), Istituto di credito di categoria (ICC), altre istituzione finanziarie (OUT), and altre banche (AB). Data for year 1926 is not available. Million liras.

– Japan: *Hundred Years of Statistics of the Japanese Economy* (1966). Current deposits in private ordinary banks. Million yen.

– Netherlands: LoN *Statistical Yearbook*(s) (various years). All deposits in the six main banks (including agencies and branches overseas). Million guilders.

– Norway: Eitrheim et al. (2004). Million kroner.

– Poland: LoN *Statistical Yearbook*(s) (various years). Deposits in joint-stock banks, Polish branches of foreign joint-stock banks, Bank of the National Economy (excluding deposits of the government), Agricultural State Bank and two communal banks. Data before 1924 are not available. Million zlotys.

– Portugal: LoN *Statistical Yearbook*(s) (various years). All deposits in commercial banks and special credit institutions. Data before 1924 are not available. Million escudos.

– Romania: LoN *Statistical Yearbook*(s) (various years). All deposits in commercial banks. Million lei.

– Spain: Aceña and Pons (2005). Current account deposits in private banks. Data for year 1936 is not available. Million pesetas.

– Sweden: *Statistisk Arsbok* (various years). Deposits by the public in private banks. Million kroner.

– Switzerland: *Historische Zeitreihen die Banken in der Schweiz* (2007). Deposits in cantonal banks and big banks (excluding interbank deposits). Million francs.

– United Kingdom: Cappie and Webber (1985). Current accounts deposits in clearing-banks, non-clearing banks, Irish banks, and Scottish banks. Data before 1922 are not available. Million pounds.

– United States: Friedman and Schwartz (1963). Demand deposits in commercial banks (seasonally adjusted). Data or year 1936 is not available. Million dollars.

– Yugoslavia: *Statisticki Godisnjak* (various years). All deposits in commercial banks. Million dinari.

Savings institutions deposits and assets

– Austria: *Statistische Handbuch für die Republik Osterreich* (various years). Deposits in the postal savings bank and in the public savings banks. Data before 1925 are not available. Million schillings. Asset data are not available.

– Belgium: *Annuaire Statistique de la Belgique et du Congo Belge* (various years). Deposits at the Caisse Générale d'Epargne et de Retraite (CGER). Asset data are from the *Compte rendu des opérations et de la situation de la Caisse Générale d'Epargne et de Retraite.* Million francs.

– Bulgaria: *Statističeski godišnik na Narodna republika Bãlgarija* (various years). Deposits at the postal savings bank. Asset data are from the same source. Million leva.

– Canada: *Canada Yearbook* (various years). Sum of deposits in the postal savings bank, in the Dominion government savings banks, and in the private savings banks. We assume deposits at the postal savings bank are invested in public securities. For the government savings banks, we assume that all

deposits are invested in public loans (deposits are used "almost exclusively to finance farms loans under the Agricultural Development Act, according to the 1937 edition of the Canadian Yearbook). For private savings banks, we use information on the assets of the savings bank of Montreal (provided in the Yearbook) to compute the share of public loans and public securities.

– Denmark: *Statistisk Ärbog* (various years). Deposits in the private savings banks. Asset data are from the same source. Million kroner.

– Finland: *Suomen Tilastollinen Vuosikirja* (various years). Deposits in the postal savings bank and in the private savings banks. Data for years 1935 and 1936 are not available. Asset data are from the same source. Million markkaa.

– France: *Annuaire Statistique de la France* (various years). Deposits in the Caisse Nationale d'Epargne (CNE) and in the Caisses d'Epargne Ordinaires (CEO). All deposits are invested in public securities. Million francs.

– Germany: *Statistisches Jahrbuch für das Deutsche Reich* (various years). Deposits in the public savings banks. Data before 1924 are not available. Asset data are from the same source. Million marks.

– Greece: *Statistical Yearbook of Greece* (various years). Deposits at the postal savings bank. Asset data are from Mura (1996). We interpolate data between 1931 and 1934 based on data for 1930 and 1935. Million drachmas.

– Hungary: *Magyar Statistikai Evkonvy* (various years). Deposits in the postal savings banks and in the private savings banks. Data are only available for year 1930 and between 1932 and 1934 (included). We assume deposits are invested in public securities. Million pengos.

– Italy: *Annuario Statistico Italiano* (various years). Deposits in the postal savings bank and in the casse di risparmio ordinarie (saving banks). Asset data are from the same source. Million liras.

– Japan: *Hundred Years of Statistics of the Japanese Economy* (1966). Deposits in the postal savings banks and in the savings banks. Asset data are from the *Financial and Economic Annual of Japan.* The data covers the assets of the Deposit Bureau (where postal savings are deposited). Asset data for the savings banks are not available. Million yen.

– Netherlands: *Nederlandse financiële instellingen in de twintigste eeuw: balansreeksen en naamlijst van handelsbanken* (2000). Deposits in the postal savings bank and in the algemene spaarbanken (general savings banks). Asset data are from the same source. Million guilders.

– Norway: Eitrheim et al (2004). Deposits in the public savings banks. Asset data are from the *Statistisk Ärbok.* Million kroner.

– Poland: LoN *Statistical Yearbook*(s) (various years). Deposits in the postal savings bank and in the communal savings banks. Data before 1928 and after 1935 are not available. Asset data are from the *Petit Annuaire Statistique de la Pologne.* Million zlotys.

– Portugal: LoN *Statistical Yearbook*(s) (various years). Deposits at the Caixa Geral de Depositos (national savings bank), excluding mandatory deposits. Data before 1926 are not available. Asset data are from Lains (2008). Million escudos.

– Romania: *Anuarul Statistic al Romanei* (various years). Deposits at the Cassa de Depuneri, Consemnatiuni si Economie (national savings bank). We assume all deposits are long-term loans, based on Brück (1995) and CEC (1964). Million lei.

– Spain: we follow Martínez (2008) by using the data from Aceña (1985). Deposits in the postal savings bank and in the cajas de ahorro (savings banks). Asset data are from Soto and Casaña (2004) for the cajas de ahorro. We assume all deposits at the postal savings bank are invested in public securities. Million pesetas.

– Sweden: *Statistisk Arsbok* (various years). Deposits in the postal savings bank and in the private savings banks. Asset data for the private savings banks are from the same source. For the postal savings bank, we assume all deposits are invested in public securities. Million kroner.

– Switzerland: *Statistisches Jahrbuch der Schweiz* (various years). Deposits in the private savings banks (Raiffeisen banks are not included). Data before 1928 and for year 1929 are not available. Asset data are from the same source. Million francs.

– United Kingdom: Horne (1947). Deposits in the postal savings bank and in the Trustees Savings Banks (TSB). Data before 1923 are not available. All deposits are invested in public securities. Million pounds.

– United States: Friedman and Schwartz (1963). Deposits in the postal savings bank and in the mutual savings banks. Data for year 1936 is not available. For mutual savings banks, asset data are from the *Annual Report of the Comptroller of the Currency*. For the postal savings bank, we assume all deposits are invested in public securities, starting in 1929, based on Schuster et al. (2020). Million dollars.

– Yugoslavia: *Statisticki Godisnjak* (various years). Deposits at the postal savings bank. Data before 1924 are not available. Asset data are from Skulic (1936). Million dinari.

<div align="center">Life insurance policies</div>

– Belgium: *Annuaire Statistique de la Belgique et du Congo Belge* (various years). Life insurance policies at the CGER. Million francs.

– Canada: *Canada Yearbook*. Life insurance policies in canadian life insurance companies (net of re-insurance reserve).

– Denmark: *Statistisk Ärbog* (various years). Life insurance policies in danish life insurance companies (includes public, joint-stock and mutual life

insurance companies). Data for year 1920 is not available. Million kroner.

– Finland: *Suomen Tilastollinen Vuosikirja* (various years). Life insurance policies in Finland. Million markkaa.

– France: Hautcoeur (2004). Life insurance policies in french life insurance companies (reinsurance included). Million francs.

– Germany: *Statistisches Jahrbuch für das Deutsche Reich* (various years). Life insurance policies in public life insurance companies. Data before 1924 are not available. Million marks.

– Italy: *Annuario Statistico Italiano* (various years). Insurance policies at the National Insurance Institute (Istituto Nazionale delle Azicurazioni). Data for years 1920, 1921 and 1936 are missing. Million liras.

– Japan: *Financial and Economic Annual of Japan* (various years). Life insurance policies at the post office and in private life insurance companies. Data for year 1936 is missing. Million yen.

– Netherlands: *Jaarcijfers voor Nederland* (various years). Life insurance policies in Dutch life insurance companies (reinsurance included). Data between 1922 and 1924 (included) and for year 1936 are not available. Million guilders.

– Norway: *Statistisk Ärbok* (various years). Life insurance policies in Norwegian life insurance companies. Data for year 1920, 1935 and 1936 are missing. Million kroner.

– Spain: *Anuario Estadístico de España* (various years). Life insurance policies in Spanish life insurance companies. Data for year 1934 to 1936 (included) are missing. Million pesetas.

– Sweden: *Statistisk Arsbok* (various years). Life insurance policies in Swedish life insurance companies (only includes policies subscribed in Sweden). Million kroner.

– Switzerland: *Statistisches Jahrbuch der Schweiz* (various years). Data for year 1936 is missing. Life insurance policies in Swiss life insurance companies. Million francs.

– United Kingdom: *Statistical Abstract of the Bank of England* (various years). Data on life insurance policies were collected by the Board of Trade and published in yearly reports. Unfortunately, access to these reports is restricted. We therefore proxy life insurance policies by the total assets of life insurance companies. Data for year 1920 to 1923 (included) are missing. Million pounds.

– United States: *Statistical Abstract of the US* (various years). Policies in force in all life insurance companies. Million dollars.

A2.   Data sources for other macroeconomic variables

Banknote circulation

Mitchell (2013). Mitchell uses the *Statistical Yearbook*(s) of the League of Nations or national statistical yearbooks. We checked and corrected Mitchell's data by going back to the original sources.

Banking crisis dummy

Bernanke and James (1991). For France, we coded the year 1932 as "non-crisis year", based on recent research by Baubeau et al. (2021). For Spain, we coded the year 1931 as "crisis year" based on the work of Jorge-Sotelo (2020). Portugal and Bulgaria are not covered by Bernanke and James, so we instead rely on Reinhart and Rogoff (2009) for Portugal, and on Kossev (2008) for Bulgaria. Our "extended" banking crisis dummy is obtained by combining our banking crisis dummy with the dummy of Baron et al. (2021).

Equity return

Baron et al. (2021).

Exchange rates

Jordà et al. (2017), and Bank of Greece (2014). For Poland and Hungary we rely on the League of Nations Statistical Yearbook (various years).

House price index

Jordà et al. (2019).

Long-term interest rates

Jordà et al. (2019). For Austria, Greece, Hungary, Poland, Portugal, Romania, and Yugoslavia, data are taken from the League of Nations *Statistical Yearbook*(s).

Nominal GDP

Bordo et al. (2001).

Real GDP

Inklaar et al. (2018).

Wholesale prices

Mitchell (2013).

A3. Primary Sources

– *League of Nations Statistical Yearbook* (various years).

– *League of Nations Memorandum on Commercial Banks* (various editions).

– *Statistische Handbuch für die Republik Osterreich* (various years).

– *Annuaire Statistique de la Belgique et du Congo Belge* (various years).

– *Canada Yearbook (various years)*

– *Compte rendu des opérations et de la situation de la Caisse Générale d'Epargne et de Retraite* (various years).

– *Statističeski godišnik na Narodna republika Bãlgarija* (various years).

– *Petit Annuaire Statistique de la Pologne* (various years).

– *Statistisk Ärbog* (various years).

– *Suomen Tilastollinen Vuosikirja* (various years).

– *Statistisches Jahrbuch für das Deutsche Reich* (various years).

– *Statistical Yearbook of Greece* (various years).

– *Magyar Statistikai Evkonyv* (various years).

– *Annuario Statistico Italiano* (various years).

– *Hundred Years of Statistics of the Japanese Economy* (1966).

– *Financial and Economic Annual of Japan* (various years).

– *Nederlandse financiële instellingen in de twintigste eeuw: balansreeksen en naamlijstnaamlijst van handelsbanken* (2000).

– *Jaarcijfers voor Nederland* (various years).

– *Anuarul Statistic al Romanei* (various years).

– *Statistisk Arsbok* (various years).

– *Statistisk Ärbok* (various years).

– *Anuario Estadístico de España* (various years).

– *Historische Zeitreihen die Banken in der Schweiz* (2007).

– *Statistisches Jahrbuch der Schweiz* (various years).

– *Statisticki Godisnjak* (various years).

– *Statistical Abstract of the Bank of England* (various years).

– *Statistical Abstract of the US* (various years).

– *Annual Report of the Comptroller of the Currency* (various years).

– *Annuaire Statistique de la France* (various years).

A4.   Secondary Sources

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The following table is a robustness check for Table 3, where we show that lagged savings do not predict banking crisis. We replicate the results from Table 3, using both banking panics and banking crises as dependent variable (rather than just focusing on banking panics as in Table 3), and including life insurance policies in our measure of savings. Every specification controls for the lag of cash, nominal GDP, and commercial banks deposits. In columns (1) and (2), all variables are in logs; in columns (3) and (4) we take the growth rate of each variable. In columns (1) and (3), the dependent variable is our banking panics dummy (based on Bernanke and James 1991); in columns (2) and (4), the dependent variable is our banking crises dummy, which includes both panics and "quiet" crises.

Table B1: Robustness check: Do savings predict banking crises?

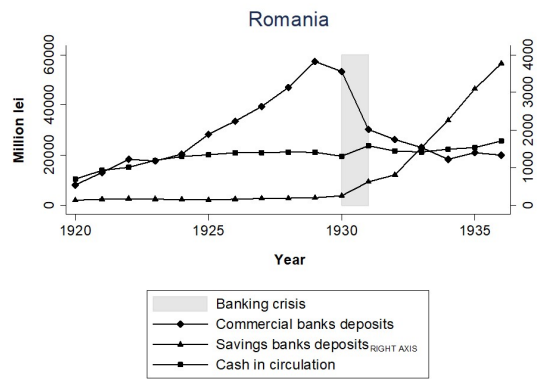|	(1)	(2)	(3)	(4)
Log savings				
(life insurance + savings deposits) (t-1)	-0.022	-0.089		
	(0.075)	(0.080)		
Growth rate savings				
(life insurance + savings deposits) (t-1)			-0.039	-0.067
			(0.118)	(0.144)
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Observations	217	217	197	197
R-squared	0.210	0.252	0.183	0.218
No. of countries	16	16	16	16

* $p<0.1$ ** $p<0.05$ *** $p<0.01$
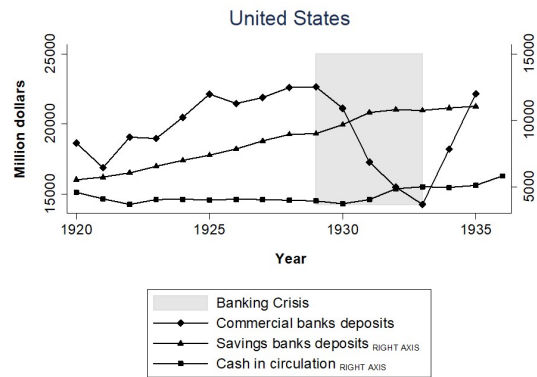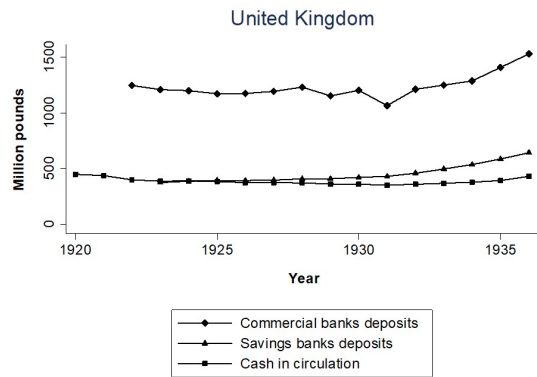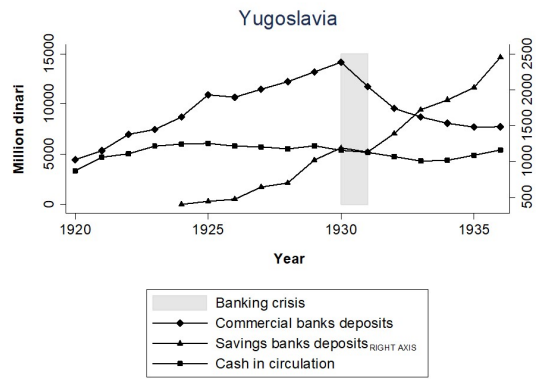
SUPPLEMENTARY GRAPHS

C1.   Country graphs

The following graphs plot the evolution of savings institutions deposits, commercial banks deposits and cash in circulation, between 1920 and 1936, for each of the 23 countries in our sample. The shaded areas represent banking crisis periods, based on Bernanke and James (1991). For a crisis occurring in year Y, the shaded area starts in December of year Y-1 and ends in December of year Y (to show the evolution of the variables during year Y).
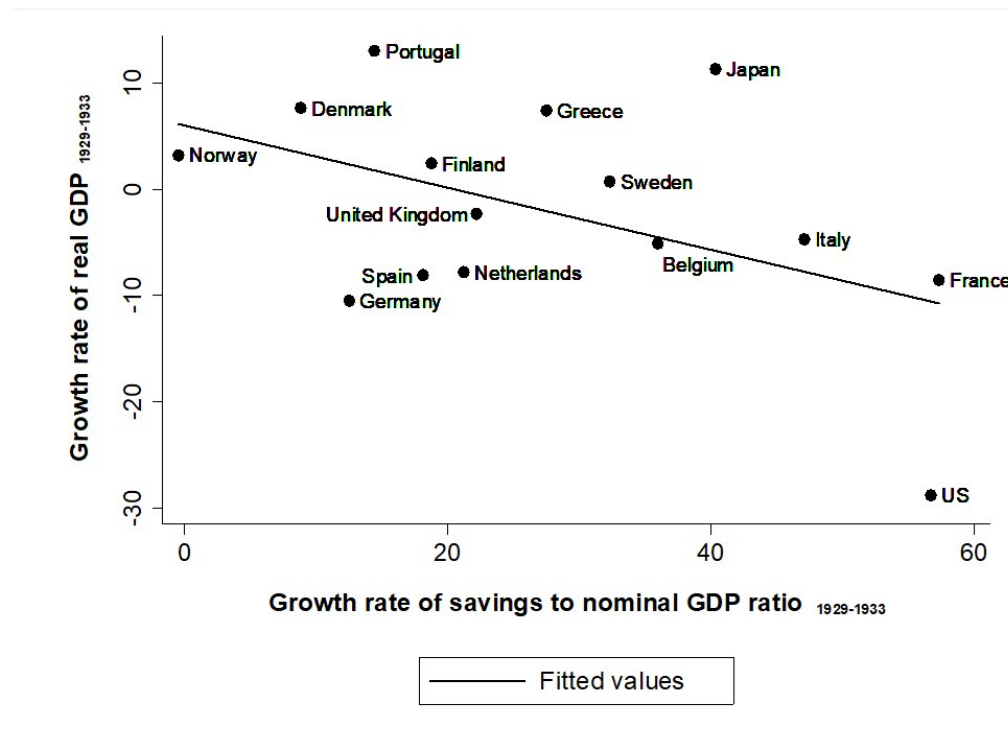
Denmark

Finland

France

Germany

Greece

Hungary

Italy

Japan

Norway

Netherlands

Poland

Portugal

United Kingdom

United States

Romania

Spain

Sweden

Switzerland

Yugoslavia
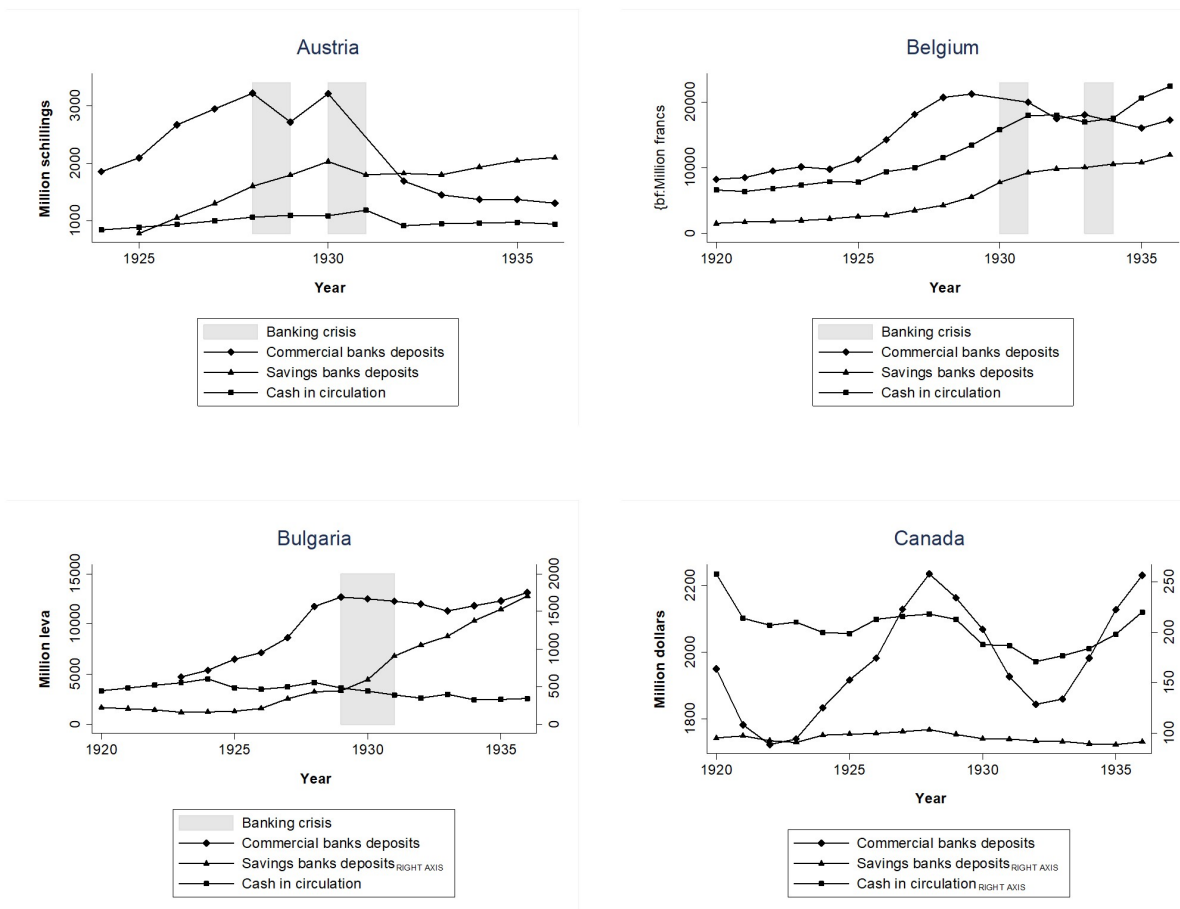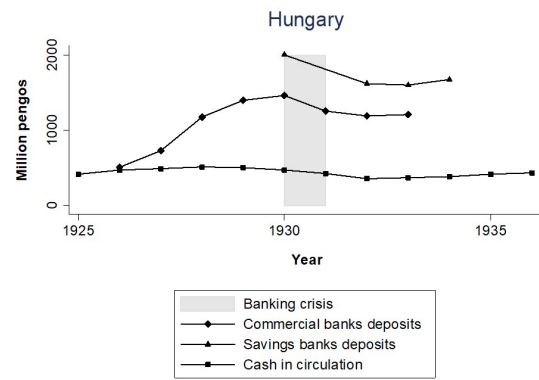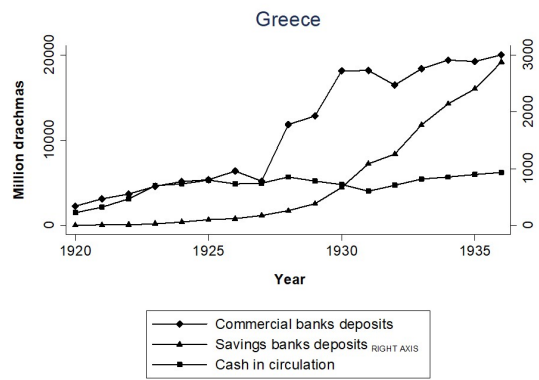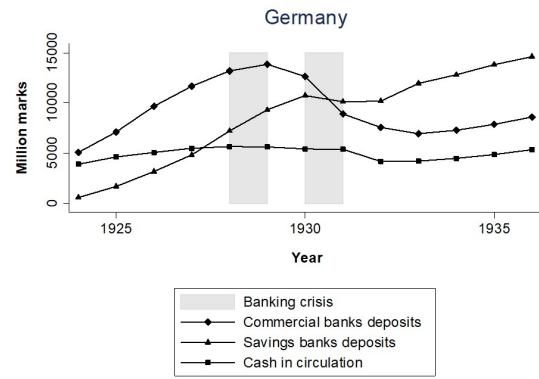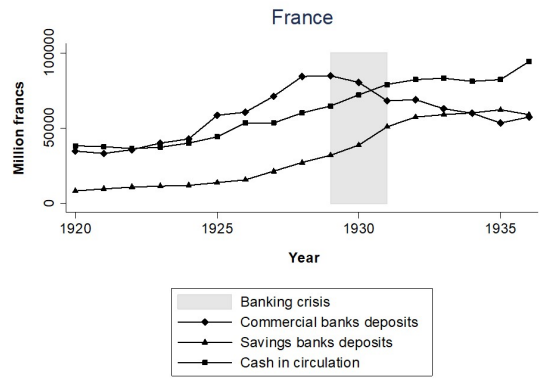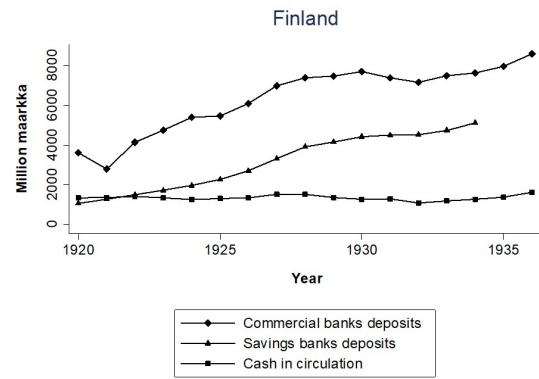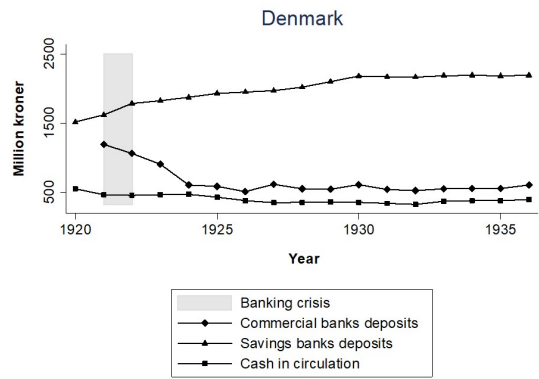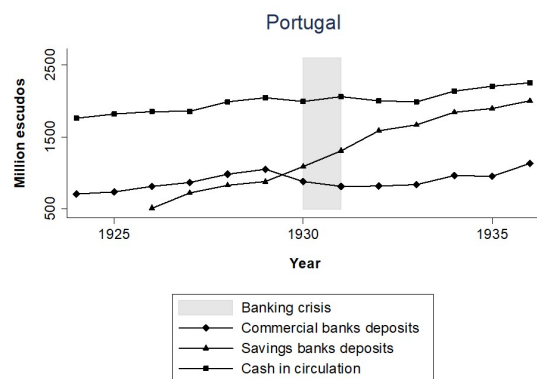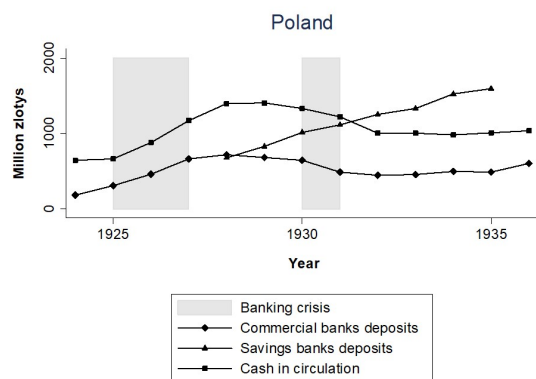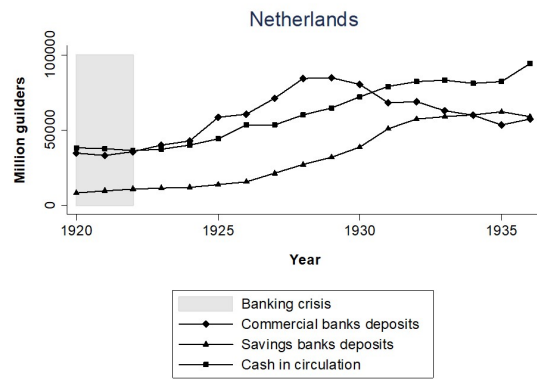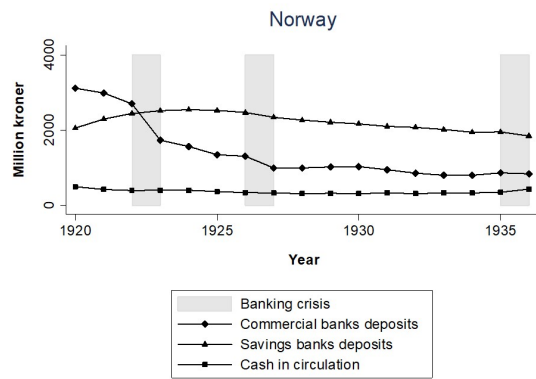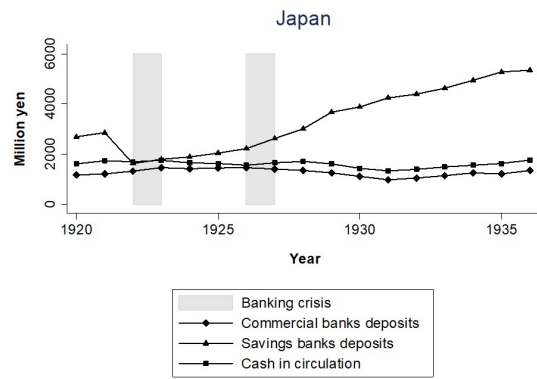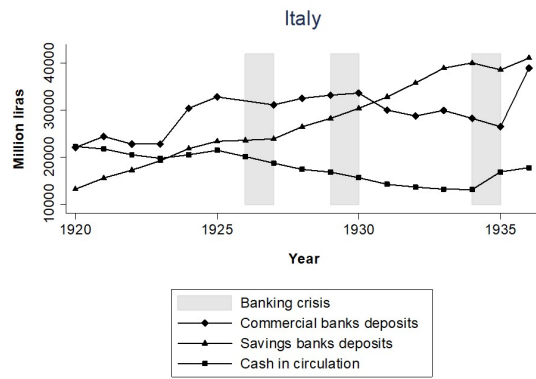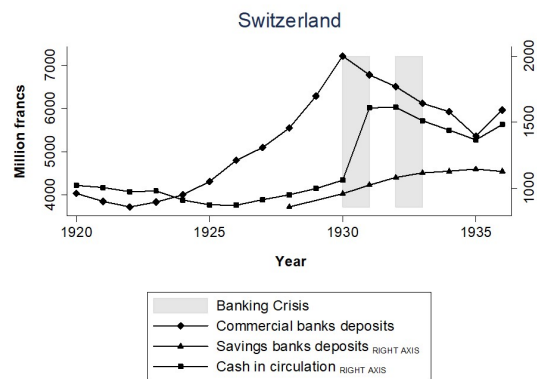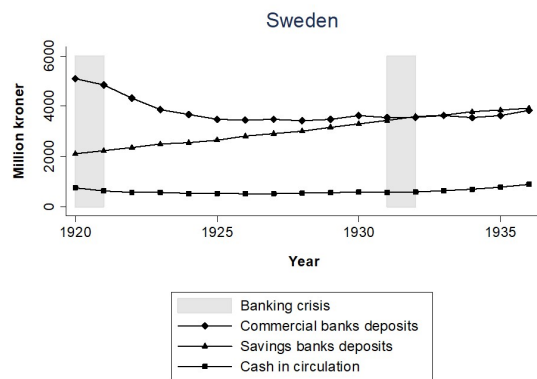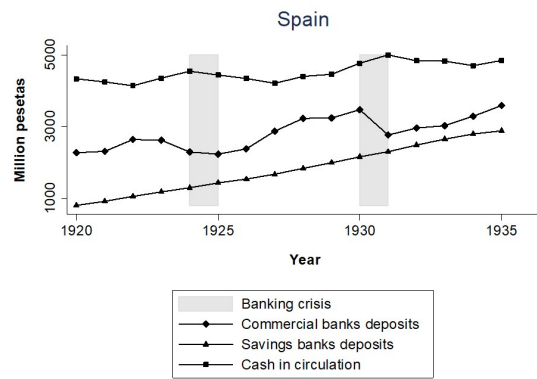
C2.   Summary scatterplot

Cross-country correlation between the increase in saving rate and real GDP growth during the Great Depression (1929-1933)

Note: R-squared=0.23 Coef=-0.29. Savings is measured as deposits in savings institutions.