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Abstract

What sets the Azorean banking system apart in the Portuguese context is the concentration of Caixas Económicas or Saving Banks accounting for half of these financial institutions in Portugal. These saving banks were promoted and had as shareholders mainly small and medium local traders and landlords with export business. This contrasts with the overwhelming concentration of big traders and traditional landlords as agents of international and national banks. These small institutions were the only network covering most of the islands and preceded the expansion of a national bank network of agencies created mostly after the Second World War

This article examines the effects of the 1929 crisis on the Azorean banking system which was generalized, and had deep and long-lasting effects, using unpublished data taken from the archive of Banco de Portugal. It is a case of contagion, typical of a banking crisis, affecting the credibility and confidence of all the institutions and leading to an interruption of payments for a period of over two years. Bankruptcies are limited to Caixa Bancária Raposo do Amaral and Caixa Económica Socorros Mútuos but the restructuring spreads over a ten year period. The contraction of monetary circulation caused by the banking crisis and the elimination of *escudo insulano* are also major contributing factors to the long and deep economic crisis that spread from 1929 to 1945. The banking crisis together with the protectionism of European markets and Portuguese colonial policies lead to the reorientation of the agro-export model to mainland Portuguese markets.

1. The 1929 crisis in the Portuguese economic literature

The 1890 crisis, the British ultimatum crisis, along with the bankruptcy of the Portuguese state, has in Portuguese literature the mythical significance of being the mother of all crises as it is related with the very survival and national independence of Portugal.

This symbolic charge relates, in an international context, with the 1929 crisis due to its extreme disruption of the economy in the three main industrialized countries, United States of America, United Kingdom and Germany- and to the high level of unemployment that followed. Unemployment in 1932 reached 23.5% in the USA, and the indices of industrial production fell to 53 with the 100 value attributed to 1929¹.

The crisis affects differently the countries where primary sector activities are dominant, according to Keynes², as "the mining and agriculture products are being sold at prices that do not cover costs". The second characteristic of the crisis in these countries is "that the time gap between interruption of production and the highest level of unemployment is larger than in the industry". In the agriculture sector the production cycle is longer, production units smaller, costs of temporary shutdown bigger and unemployment less visible as farmers maintain activity accepting losses in income .The financial problems of interrupting activity are according to Keynes greater in countries were agriculture and mining are the main activities and sources of income.

According to Rosas (1986) the great depression was felt late in Portugal, for a short period and with a smaller impact than in other European countries³. This thesis is also shared by Nunes, Bastien and Valério (1994)⁴, while recognizing that the Portuguese economy did not avoid the effects of the crisis it did "avoid a reduction in the level of economic activity and the average income, due in part to its nature still predominantly rural, to an eclectic and effective economic policy that attempted to

moderate consumption, encourage investment and sustain exports through competitive devaluation". They stress the importance of the short term economic policy measures, which started in 1922 with the reform of the Portuguese tax system, reducing the public deficit and the indebtedness of the Portuguese state and continued into 1928 and 1929 with the new tax reform and fiscal consolidation of the National Dictatorship. Mata (2002) identifies as main effects of the 1929 crisis the reduction in export and emigrant remittances. The decrease of imports and the return of Portuguese capital allow even a temporary return to the gold standard and to peg the escudo to the British pound.

Neves and Belo's (2002)⁵ analysis of the cyclical behaviour of the Portuguese economy in the 1910-1958 period, using the long series for the Portuguese economy of Baptista and alii (1992), does not reveal a significant correlation with the European and United States economies. The lower statistical association of the cyclical components of the product and export series supports the hypothesis of Rosas (1986) that the closeness of the Portuguese economy acts as a protection against the external effects of the 1929 crisis. The association of a closed economy and lower development level with the preferential linkages to Brazil and the colonial empire are also identified as contributors to the minor impact of the Great Depression.

After setting this general framework of the Great Depression in Portugal, as seen from the Portuguese economic literature, this article assesses its impact on the Azorean archipelago economy using the information on the banking crisis. The scholarly benign view of the effects of the 1929 crisis is contrasted with bankruptcies and bank runs in a small peripheral economy. From 1850 onwards, the free trade economic environment and liberal banking laws created a favourable setting for the expansion of a modern Azorean banking system supporting an agricultural export oriented towards expansion as discussed in section 2 and 3 of this article. The change in the economic environment in the 1920 is marked by the 1929 economic crisis and the 1930's banking crisis discussed in section 4. A comparison of balance sheet items from 1910 to 1945 yields a more detailed insight of bank's behaviour and its effects on the economy. Unpublished data taken from the archive of Banco de Portugal and the archives of present day banks are complemented with newspaper advertisements and reports from the first Azorean Congress in 1939⁶.

2. The economic structure of Azores at the beginning of the 20th century

The flexibility of the Azorean economy and its agro export model has been a constant since early settlement. During the last centuries wheat is followed by pastel and corn and later on the orange cycle that lasts one hundred years (Dias, 2008)⁷. Orange exports are dominant from the second half of the 18th century to the last quarter of the 19th century, and is followed during the last period of the 19th century by several experiments with industrial cultures: sugar beet, sweet potato, tobacco, chicory, tea. The orange export business contributed to the accumulation of capital later on invested in new agro-industry projects. The economic restructuring would once again be based on the traditional agro-export model; however, contrary to what happened in the past, the gentlemen farmers would now diversify their investments.

In the beginning of the 20th century the agro-export model did not have a dominant commodity but was based on a more diversified base: pineapples, *espadana*, tea, sugar and alcohol produced from sugar beet and sweet potato, respectively. Sugar beet becomes the main industrial culture, in area cultivated and income generated. Between the two world wars the archipelago was self sufficient in sugar, exporting small quantities to the mainland. Sugar from sugar beet and alcohol was produced at very competitive prices in the Azores but the expansion of the local agro-industry was

limited by a policy of exporting quotas to the mainland market to defend colonial sugar and preserve the income generated from high tariffs applied to foreign products. The same policy was applied to all the main agro-industrial Azorean products, tobacco and tea. The income from sugar beet declined after the First World War and these agriculture cultures were substituted slowly by cattle production.

As Casaca (1985) refers in the interwar period the export of livestock products will become dominant: "The agro-industrial export model failure (the pineapple of São Miguel has never recovered the markets lost during the first war), contrary to continental interests (for alcohol) or colonial (case of sugar, tea, belfry, chicory)." The growing relevance of meat and milk in the model of urban consumption, the advancement of manufacturing and storage techniques for dairy products, the structure and size of the property of the Azores, and the clear complementarities of the Azores and the Portuguese mainland explain this transformation, which will be particularly sensitive on the island of S. Miguel. Live cattle exports to the Lisbon market reach 20.148 cattle heads in the 1935 to 1937 period, while other export commodities are as follows: tea 102 tonnes, sugar 399 tonnes, alcohol 454 thousand litres. The dairy industry begins as an artisanal offshoot of cattle farming early in the century but evolves from a group of 51 dairy processors in 1928 to 31 in 1929, 23 in 1936 and just 3 in 1947, of which two with capital from the mainland, according to Faria e Maia (1947- $(1948)^8$. The same author refers that in 1945 butter and cheese exports to the mainland had a market share of 34% and 43% respectively. Live cattle exports had a market share of 22% in the Lisbon market⁹.

In the first half of the 20th century a diversified export portfolio of pineapple, sperm whale oil, live cattle, butter, cheese, alcohol and *espadana* completed the main productions for local consumption, corn, wheat, broad beans, wine etc. A structural

change in the Azorean economy took place at the beginning of the 20th century. First there is a change in the export markets for Azorean commodities. A slow and continuous decline of the United Kingdom and German market share and a growing but steadily shift towards the mainland market. The agro-export model supported by a free trade environment moves towards a more inward looking and less specialized economy. The two world wars, the closing of the emigration to the United States, the strong protectionism of European markets and the policy protection for mainland and colonial productions contributed to the isolation and steady decline of the Azorean economy and the inward character of the society.

3. Azorean Saving Banks (1850-1945)

The contribution of the gentlemen farmers, during the 19th century, is identified by Miranda (1989)¹⁰ as a major entrepreneurial source to the development and modernization of the Azorean economy. The income generated in the orange export business was reinvested in several agro-industrial projects later on, and financed the building of the main harbour in the Azores during the 19th century - Ponta Delgada. The wealth of these gentlemen farmers derived from the agribusiness and export activities contributing to the dominance of the main agrarian ideal and was preserved well into the 20Th century in the traditional agro-export model.

Credit to fund this operation was provided by local gentlemen farmers with links to some important commercial banking houses in the United Kingdom as well as some local traders, as Dias (2007)¹¹ illustrates in the commercial and financial relationships between George Hayes, Salomão Bensaude, Clemente Joaquim da Costa , João Melo Abreu with William Mc Andrew & Sons. Later on the transfers from Brazil and United States emigrants will also feed into the regional saving banks but in the second half of the 19th century the export of agricultural products was managed by these export-import houses which provided transport and insurance and managed the flow of commercial bills.

In the transition from the eighteen hundreds to the nineteen hundreds alongside the new banking institutions survive several traders cum local bankers. The insular newspapers provide several examples of adverts by local traders which lend money, discount commercial paper, act as pawn brokers and simultaneously are local agents for national and foreign banks and insurance companies. According to Sousa $(2002)^{12}$, an important group of national and international commercial banks, existing since the end of 19th century, managed their business through their agents in Ponta Delgada and Angra do Heroismo, namely: Banco Lusitano, Banco do Minho, Banco Comercial do Porto e Lisboa, Banco Lisboa e Acores, Banco Aliança, Lloyds, Credit Lyonais, Cheque Bank, Thos. Cook & Son, J.T. Morgan e C°, Knauth, Nachod & Khune of New York, Drexel & cº of Philadelfia, Banco Nacional Ultramarino, Banco União, Cia Geral de Crédito Predial. The branches of international and national banks were represented by wealthy businessman, well established in the Azorean commerce, Bensaude e C°, João Melo Abreu, George W. Hayes in Ponta Delgada and Aniceto António dos Santos, Manuel Gonçalves Fagundes, Visconde de Bruges amongst others in Angra do Heroísmo.

This type of businessman survives well into the 1900s as the case of Melo Abreu most notoriously illustrates, who besides accumulating business interests in the beer industry, was an agent of a national bank and a member of the board of Caixa Económica dos Socorros Mútuos. As a sign of archaism there was little specialization, the industrial was a trader as well as a banker as Braudel refers for the sixteen and

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seventeen hundreds. The new banks and saving institutions brought with them modernity and professionalism to the financial activity.

National banks as Banco de Portugal were also present from 1892 in Ponta Delgada, 1894 in Horta, and 1895 in Angra, integrating the Azorean economy in a national network, and from 1887 were already managing the issue of local currency, *escudos insulanos*. Caixa Geral de Depósitos created in 1876 and merged in 1885 with Caixa Económica Portuguesa was also present at the end of the 19Th century. Little is known about the impact of their operations in the Azores, as Silveira e Sousa (2002) asserts. Both institutions centralized the bank operations of the Portuguese administration while practicing commercial operations.

What sets the Azorean banking system apart in the Portuguese context is the concentration of Caixas Económicas or Saving Banks accounting for half of these financial institutions in Portugal. The first Azorean Caixa Económica (1845) was founded in Angra do Heroismo one year after the creation of Caixa Económica do Montepio Geral and follows the publication of a Bill of Law which contracts with Companhia Confiança Nacional the establishment of a network of Caixas Económicas. All of them, except Caixa Económica de Angra and Montepio Geral, collapse in the 1846-47 banking crisis, according to Valério (2006)¹³. The second groups of modern Azorean saving institutions founded were Caixa Económica Faialense, created in 1862 and linked to the Masonic association Sociedade Amor da Pátria (1859), Caixa Económica da Associação de Socorros Mútuos, founded in 1869, and Caixa Económica das Classes Laborais da Terceira. Soon after, several savings banks were founded, almost always connected to the Misericórdias (charitable organisations), together with an insurance company with Azorean capital, Companhia Açoriana de Seguros, and with

no connection to national or international banks. With the dawn of the 20th century, a few other financial institutions appeared on almost every island, all of them having as their corporate purpose the financing of agricultural production, the management of the modest workers' savings and the assistance to those who could afford credit.

Relying on the volume of assets and of deposits as indicators of size, one must stress the importance of Caixa Económica do Montepio Terceirense as the biggest saving bank, followed by Banco Micaelense and Caixa de Crédito Micaelense. This model, a savings institution associated with an insurance cooperative, *mutualista*, is common in the 19th century. In 1905 Montepio Terceirense had already established a network of six agencies in six islands (Ponta Delgada, Vila Franca do Campo, Praia da Graciosa, Velas, Horta and S.Roque do Pico). The Caixa de Crédito Micaelense evolves from an earlier savings institution the Grémio founded in 1907 by a large group of small shareholders most of them local businessmen and some landlords, amongst them we find the Viscount of Porto Formoso. Albano de Azevedo, a small shareholder, is referred to the manager and in time becomes the main shareholder.

A second group of saving institutions linked to Misericórdias (charitable institutions) was created: Caixa Económica da Misericórdia de Angra (1893), Caixa Económica da Misericórdia de Ponta Delgada (1925), Caixa Económica da Santa Casa da Misericórdia da Povoação (1932). Most of them are modest with a small economic impact but socially relevant and survive until the end of the 20th century.

Only two banking houses, in a total of 45 were created in the Azores according to Valério (2002)¹⁴. One was Frazão Pacheco & Comandita, and the biggest Casa Bancária Raposo do Amaral, founded by José and Nicolau Raposo de Amaral in 1917 and having as main shareholders the Raposo de Amaral family. Two regional banks were created: Banco Micaelense in 1912 and Banco do Faial in 1922. Banco do Faial,

originally with a capital of 1.2 million *escudos insulanos* raised it to 3 million in the following year, to become the third biggest Azorean banking institution was a very successful but short lived bank. Banco Micaelense begins its activities in 1912, with an initial capital of 230 thousand *escudos insulanos* raised from a large group of local landlords and businessmen; it's the longest living Azorean bank.

The new saving banks were promoted and had as shareholders mainly small and medium local traders and landlords with export business in contrast with the overwhelming concentration of big traders and traditional landlords as agents of international and national banks. These small institutions were the only network covering most of the islands and preceded the expansion of a national bank network of agencies created mostly after the Second World War. The model of Caixa Económica as saving institution associated either with Mutualistas or Misericórdias was dominant as its initial capital requirements were smaller. As Lains (1995) and Sousa (2002)¹⁵ refer, Caixa Económica did not have a fund of capital requiring a return and they were mostly focused on building a portfolio of deposits. In the Azores emigrant remittances first from Brazil, after the 1870's, and later on from the USA were an important resource contributing to the expansion of this saving institutions.

At the end of the First World War there were 14 saving institutions, mostly Caixas Económicas and two banks which provide the information for the following analyses of the effects of the 1929 crisis. A dataset of balance sheet assets and liabilities for this sample of Azorean Banks has been assembled for the period from 1910 to 1945. Unpublished data have been taken from the archives of present day banks and the archive of Banco de Portugal.

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4. The 1929 crisis and bankruptcy in the saving banks

The 1929 crisis affected the Portuguese banking system causing, according to Nunes, Bastien and Valério (1994) and Telo (1994),¹⁶ the bankruptcy of two currency issuing banks is the North of Portugal, the Bank of Minho and Commercial Bank of Porto, but not generating a widespread run on bank deposits. Valério et al. (2006)¹⁷ refer to the 1929-1931 years as a period of difficulty for the banks but do not classify it as a banking crisis. Bank distress in 1876 and in 1891 is rightly classified as a banking crisis but this does not apply to the 1929-1931 events because it did not affect "the five major banks or generate a generalized panic".

In the Azores, the crisis affects the majority of banks leading to the closure of some in 1934 and 1935. The 1926 earthquake and the 1929 crisis undermine the economy of the district of Horta. As early as 1929, the Caixa Económica Faialense in its annual report refers to the effects of the crisis "that caused much suffering (...) since the time that the earth was shaken to its foundations" and again in 1932 to its effects on the Horta district economy and lending activities. According to the 1935 report of the Caixa Económica Picoense the year was of "great embarrassment" and distrust leading to withdrawal of deposits resulting from lack of confidence in the savings banks. In 1935 this leads to interruption of payments and the temporary closure of Banco do Faial.

As for the district of Angra Heroismo, the situation, reported in Proceedings of the First Congress Açoriano conducted in 1938, was deplorable. "In 1932 the saving deposits in the four Caixas Económicas amounted to sixty million escudos (...). This larger sum was the result of the flow of emigrant gold remittances from North America and Brazil which have stopped and even reversed. This together with very high taxes affected the economic equilibrium and accentuated the impact of the crisis" (1939, 474)¹⁸

The Fiscal Supervisory Board of Caixa de Crédito Micaelense, in the March 20 1931 meeting, asked Banco de Portugal "to prevent a difficult but foreseeable situation where it would be necessary to obtain numeraire through loan or discount on the values we have, because any of these operations are completely unfeaseble now, given that neither the Bank of Portugal nor the Caixa Geral de Depósitos are able to intervene without proper superior authorization". This difficult but foreseeable situation became reality, according to Crédito Micaelense 1934 annual report analysis. A request for a rescue operation by Casa Bancária Raposo do Amaral then in serious financial difficulties was discussed. The acquisition proposal was rejected by unanimity by all shareholders due to the government and the central bank decision of not to intervene in other financial institutions, Banco Micaelense and Caixa Económica da Associação de Socorro Mútuos de Ponta Delgada.

The interruption of payments and a generalized bank closure at the end of 1934 are referred in several annual reports as "a great catastrophe and a big blow to public confidence" with large impact in the local economy. The situation described in the annual reports of Azorean banks and in the local press is substantially different from that described for Portugal by Nunes, Bastien and Valério (1994) setting a widespread crisis of confidence in the system that is fought only by the temporary suspension of payments for most banks and permanent closure of the Casa Bancária Raposo do Amaral and Caixa Económica da Associação de Socorros Mútuos of Ponta Delgada. Calomiris and Mason (2003) identify this type of bank failures and deposit contraction as a banking crisis when referring to the 1929-31 banking crisis in the United States¹⁹.

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Furthermore this is also a case of local contagion typical of a banking crisis and covering most of the institutions regardless of their soundness. Milton Friedman and Anna J. Schwartz (1963)²⁰ advocate that bank panics and loss of confidence or "fear" are a primary cause of the 1931 banking crisis in the USA and sources of shock to the real economy. In the Azorean case a run on bank deposits is reported by Banco Micaelense on January 2nd, 1935. Banco do Faial suspends payments in April 1935. In Angra "there is also a temporary suspension of payments by the most important Caixa Económica" and the bankruptcy of an important commercial trader with a loss of 2.5 million escudos as reported later in the 1st Azorean Congress. The bankruptcy of Caixa Raposo do Amaral and Caixa Económica da Associação de Socorros Mútuos is finally declared and an administrator is nominated to organize a meeting of debtholders. The bankruptcy process and the reorganization of debt led to the creation of Banco Agricola de S.Miguel as a successor to Caixa Bancária Raposo do Amaral in 1936 and the reconstitution of Banco Micaelense which only reopens in January 1937. Caixa Económica de Socorros Mútuos is the only bank that is not reorganized and reconstituted. The fragility of the Azorean banking system to episodes of loss of confidence is the result of the difference between the liquidity of funds, mostly deposits, and investments in property investment and agro-industrial activities weakened by the crisis of 1929 or by episodes of fraud.

The analysis of annual reports data provides us with a more detailed view of this banking crisis. The period under consideration begins with the introduction of escudo in 1910 and ends in 1945. It is a rich and eventful period including the monetary reforms of escudo insulano and monetary integration with the elimination of the Azorean currency. In the banking system it encompasses the creation and expansion of a network of regional banks as reported in section 3.

The analysis is organized in the following sub periods:

- a) The Republic: 1910-1928;
- b) National Dictatorship and the Great Depression: 1929-1939;
- c) World War II: 1940-45;

From very small initial values of cash, current accounts and saving accounts, in the 1910 to 1928 period, the data reveals a steady and robust growth with annual average rates of 163%, 168% and 138% respectively. As illustrated in figures 1, 2 and 3 cash and deposits in other banks reach 25 million escudos, cash and current accounts 42 million escudos and saving accounts 43 million escudos. The growth in funds available in the regional bank system is a good indicator of monetary growth even without the data of currency in circulation outside the banking system either for transactions purposes or for private saving. These rates of growth are good indicators of the expansion of the banking system and its increased credibility.

The data for the second period reveals a strong reduction of the funds available in the system and are a good indicator of a monetary contraction. The decrease in currency in circulation is shown in figure 2, with an abrupt decrease in the cash available and current deposits between 1931 and 1939. A very clear description is done in the 1st Azorean Congress:

«Devaluation of small and great rural property increases by the day, there is a shortage of currency in circulation in the Azores islands, barter is generalized and bread is used to pay wages» (1939, 467).

The amount of cash available decreases from 24.8 million escudos in 1929 to 10.8 million escudos at the end of the period, a reduction of 56% which is accompanied by the stagnation of current accounts which grow 5.8% from 19 million escudos to 20 million escudos. Overall there is a 29% contraction of liquidity from an initial value of

44 million escudos to 31 million escudos. This reduction in the monetary circulation is accompanied by a decline of 53%, from 47 million escudos to 22 million *escudos*, in saving deposited in banks and Caixas Económicas as illustrated in figure 3.

The initial decrease in the value of saving deposits, in 1930, is followed by a small and temporary recuperation in 1931 and 1932, and a long and sustained contraction going as far as 1942. A ten year period during which Azorean savings leave the banking system and take refuge in the private vaults or are sent abroad or feed circuits of informal lending is reported by a congressman from Terceira in a communication to the 1st Azorean Congress:

"As of 31 December 1937 the sum of deposits in the four savings and loans banks was reduced to Esc. 33.428.500\$00 – less than half of the amount reported five years ago. The money either has migrated to the USA and Brazil or entered the private lending circuit or is hiding in the private vaults useless and unproductive afraid of further losses " (1939, 475).

The most striking features of the system evolution in the period 1929-39 are described by the indicators in Table 1:

- The ratio of cash reserves relatively to current accounts decreases 58% to an average value of 76%;

-The ratio of cash reserves relatively to all deposits is slowly decreasing with an average value of 29%;

- The ratio saving accounts / current accounts has also a negative growth in the period while keeping a positive average value of 1.55;

		CR/CA	SA/CA	CR/(CA+SA)	
Average Value	1910-1928	2.32	10.98	0.30	
	1929-1939	0.76	1.55	0.29	
	1940-1945	0.57	0.64	0.35	
Growth Rate	1910-1928	-0.67	-0.97	7.41	

Table 1.Statistics of Monetary Stock ratios

1929-1939	-0.58	-0.55	-0.31
1940-1945	0.26	-0.05	0.29

Note: CR/CA: Cash Reserves/Current account; CA/SA: Current account/Saving Account; CR/ (CA+SA): Cash Reserves/ (Current account +Saving account)

The effects of the crisis are aggravated by the lack of assistance from Caixa Geral de Depósitos, which in the words of another congressman to the 1st Azorean Congress only gathers deposits and makes transfers without any further financial assistance. Banco de Portugal nominates administrators and promotes general assemblies of creditors in the 1934-35 period supporting the reconstitution and reorganization of local banks. Neither of these institutions provides liquidly to the system as lenders of last resort and there is no deposit insurance scheme operating at the time.

In the third period, 1940-45, there is an increase in liquidity in the banking system from 43 million *escudos* in 1940 to 67 million *escudos* in 1944. The last year in the data set, 1945, is abnormal due to the acquisition of Caixa de Crédito Micaelense by Banco Espírito Santo e Comercial de Lisboa. Cash and near cash duplicates from 10 million to 24 million *escudos* and there is a strong growth in current account values to 43 million *escudos*. At the end of the period however the sum of current and saving account values, at 63 million *escudos*, are slightly below the 1929 values. The market and the bank system is still fragile as the 1943 annual report from Caixa de Crédito Micaelense states, referring to the small number of lending and borrowing operations in the local market " so reduced that it is not enough to guaranty the viability of the surviving banks". This evaluation induces the shareholders to open negotiations that lead to its sale to Banco Espírito Santo e Comercial de Lisboa. This acquisition marks the end of the attempt to build up a regional banking system with Azorean capital that began early in the XX century with the creation of Caixas Económicas.

Two main factors contribute to this prolonged crisis of the Azorean bank system according to 1^{st} Congresso Açoriano: «the unfortunate policy of rapid and excessive appreciation of the escudo, was the main contributing factor in the islands, as it originates a rapid devaluation of property values with to a third of its previous value, when most of it was a guaranty to private loans with very high interest rates reaching 20% ». The effects of the crisis are stated with clarity by Furtado Leite, the rapporteur of the Trade and Industry session at 1^{st} Congresso Açoriano:

"The tremendous crisis that plagues us (....), a crisis of work, lack of purchasing power of the [working class], increasingly immobilization of fearful capital, excessive interest charged, a string of bankruptcies of weaker firms affect the loss of confidence ".

The solutions are identified as well: "increase the liquidity in the economy supporting lending at zero interest rate to trade, industry, and agriculture supported by a valuation of agriculture property at higher values. The government should increase the supply of money based on the guaranty of property or by the emission of public debt. (1939, 459-461)"²¹.

Conclusion

The factors contributing to the deep and long crisis in the Azores are multiple. First of all the effects of the international crisis affect an economy dependent on the agro-export business which has as main markets the United Kingdom and Germany. Then the end of emigration to Brazil and the United States limit the outflow of the excess of labor and decrease emigrant remittances.

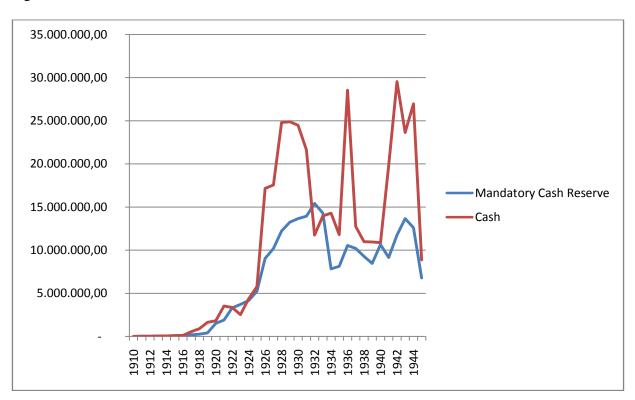
National factors add to the international factors, the 25% devaluation of escudo insulano and national monetary integration, the lack of capacity of national banks, Banco de Portugal and Caixa Geral de Depósitos, to provide additional liquidity and act

as lenders of last resort. The data analysis has produced as main conclusion a 29% contraction of liquidity and a 53% reduction of savings deposits which are associated with an overall reduction in monetary circulation in the 1929-1939 period.

At the local level the main factor was the 2/3 devaluation of property, according to Furtado Leite in 1st Congresso Açoriano, and the immobilization of capital locked in these investments which contributed to prolong the effects of the crisis till the end of the Second World War.

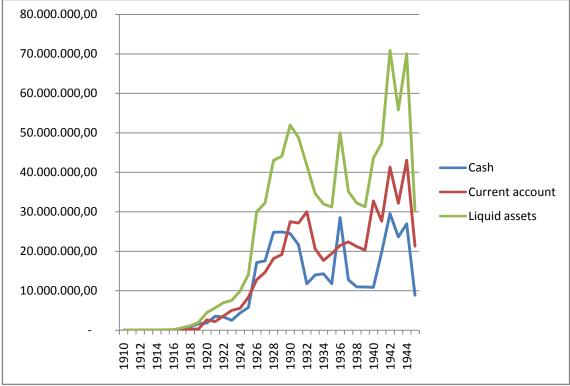
The evidence supports the assertion that the initial external shock of trade reduction and falling external prices was amplified by domestic monetary factors and insufficient support by the central bank and Caixa Geral de Depósitos.

Figure 1. Evolution of cash reserves



Source: Authors' calculations from annual reports data. Note: Mandatory cash reserve determined by law;





Source: Authors' calculations from annual reports data.

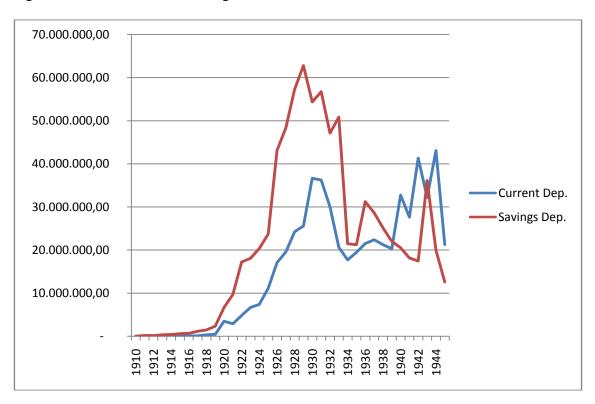


Figure 3. Total current and savings accounts, Azores, 1910-1944

Source: Authors' calculations from annual reports data.

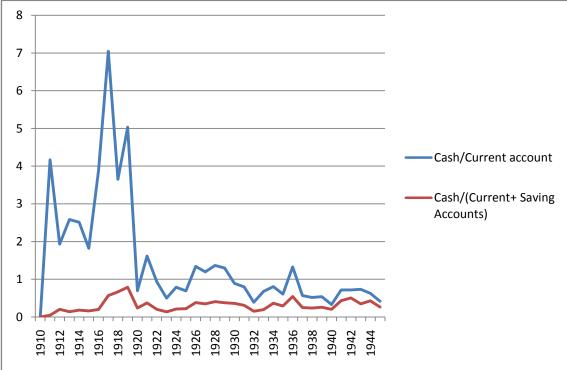


Figure 4. Evolution of ratio influencing monetary stock

Source: Authors' calculations from annual report data.

NOTES

¹ Bruno Marcel e Jacques Taieb, *Les grandes crises, 1873, 1929, 1973*, Paris, Nathan, 1992, 2.^aed, pp. 150-155.

² John Maynard Keynes, "A grande crise de 1930" in A grande crise e outros textos, Lisboa, Relógio d'Água, 2009, pp.167-175.

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