Imperfect but Hard Competition: the Portuguese Banking Sector in the Golden Age (1950-1973)

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Introduction

The institutional environment of Portuguese banking during the Golden Age years of economic growth (1950-1973) has been criticized in many instances, at the time and in recent literature. Direct observers of the period, such as Wallich (1951) and Pereira (1953, 1956a, and 1956b), and historians including Sérgio (1990) and Valério (2010) have stressed two main aspects of that environment. On the one hand, it would have granted excessive protection to existing banks, allowing them to obtain high rents, a disincentive for them to compete and innovate. On the other hand, the legislation would have forced banks to concentrate their activity excessively on short-term commercial paper, thus preventing them from contributing effectively to finance growth.

Such supposed features of the banking system seem to be in contradiction, however, with the high growth rates of the years 1950 to 1973, the best in terms of economic growth in all of Portugal’s history (cf. Amaral, 2010). The apparent contradiction is not limited to Portugal, in fact, as rapid growth in many economies in that period occurred within a framework of heavily regulated financial systems. This is what Monnet (2012) has appropriately called the “financial paradox” of the Golden Age. It is difficult to reconcile the idea that a relatively free and competitive financial system is essential to finance investment at efficient prices (e.g, Freixas and Rochet, 1997, Guzmán, 2000, or Barth et al., 2001) with the fast growth seen during the Golden Age.
The “paradox” only exists, of course, if we believe that an environment of competition is the one that assures the most efficient outcome in terms of investment and capital accumulation. But some economists have questioned this, based on the notion that banking is an activity with special features (cf., for instance, Petersen and Rajan, 1995, Cetorelli and Perotto, 2000, or, for a review paper, Northcott, 2004). When we turn to economic history, however, we find very few authors who have sought to deal directly with the “financial paradox” of the Golden Age. Such important works as AAVV (1994) and Cassis et al. (1995) make a thorough description of the various national legal frameworks but do not assess the impact of those frameworks on the actual behavior of the agents in the market or on the growth performance of the various economies. Only a few more recent works have sought to go beyond such limited analyses. Some have followed the path of showing how the institutional environment of financial repression was not enough to fully curtail competition: Bordo et al. (1994), Battilossi (2000), Capie and Billings (2004), Pons (2002), and Pueyo (2003) are examples, for Canada, Europe as a whole, England, and Spain, respectively.

Other works have followed a different path, namely that of suggesting that financial repression was ultimately irrelevant for growth. Some countries would provide clear examples of how it was possible to find means of financing investment that were independent of the existence of a more or less competitive financial system. Wyplosz (1999) pays particular attention to the cases of Belgium, France, and Italy, and shows that in all three countries restrictions on private banks were compensated by various schemes (sometimes involving public institutions) allowing for a good flow of funds for investment. Both Quenouëlle-Corre (2005) and Monnet (2012) also stress the positive effects of the complex system existing in France.
As we show in this paper, Portugal is an interesting case in the international perspective. In 1933, an authoritarian regime, the *Estado Novo*, was introduced in the country. This was a regime with a strong dirigiste penchant in economic terms. It is not surprising, thus, that the country’s banks were very tightly regulated, even if in this respect the regime did not differ much from the rest of the western world. The legal framework, however, left a series of loopholes open, and banks used them in order to circumvent its restraints and compete with each other.

The signs of competition were various. We present them in this work in an essentially descriptive way. Much along the lines of Capie and Billings (2004), we provide “evidence” of competition, leaving for some future work a formal test of the presence of that competition and the degree to which it existed. We make a case that competition resides at the origin of the modernization of Portuguese banking, mostly in two dimensions: the growth of time deposits and geographical expansion. In order to compare with other western countries, we provide some benchmarks. Despite the difficulties involved in these comparisons, due to many national specificities, we believe that the data presented are enough at least to show that the indicators for Portuguese banks did not differ greatly from those of their counterparts in other countries. This paper is dedicated to the question of deposits, but a full picture of the relationship between the financial sector and the economy needs to take the question of credit into consideration as well. For the moment, that part of the story has to wait for another work.

The remainder of this paper is as follows. Section 1 presents the main features of the monetary regime and the banking legislation, stressing the very tight rules in place, designed to hinder competition. Section 2 briefly describes the Portuguese banking system between 1950 and 1973, with special attention to the degree of concentration in
the market and the behavior of the seven most important banks. Section 3 presents the
evidence gathered for those seven banks regarding cash ratios, interest rates, deposits,
branching, capital ratios, and profitability.

1. Fiscal policy, monetary policy, and banking regulation

1.1 Fiscal and monetary policy

The Golden Age years of economic growth in Portugal coincided with the last quarter of a century of the life of the Estado Novo, an authoritarian regime lasting for 41 years (1933 to 1974). The beginning of the regime came at the end of a long sequence of stabilization measures taken from 1922 to 1931. They were successful in solving the imbalances coming from World War I and allowing the escudo to get back to the gold-exchange standard in 1931 (Valério, 1984, Santos, 1994, and Silva and Amaral, 2011). Even if the return was short-lived (as barely six months later Portugal abandoned the system again), this was not the result of renewed fiscal and monetary imbalance - quite the contrary: Portugal simply followed Britain when sterling was devalued and its convertibility suspended. But even after doing this, Portuguese authorities continued to follow a rule that sought to emulate the conditions of the gold standard (Valério, 1984, and Silva and Amaral, 2011).

Crucial for the adoption of this rule were the principles of fiscal balance and low inflation to which the Estado Novo adhered quite closely. Very rarely did the Government present an unbalanced budget during this long political regime. From 1931 onward the monetary base was indexed to the position of the balance of payments, more specifically to the availability of foreign currency and gold as reserves at the Bank of Portugal. In 1946, following a bout of capital flight, the Government established a money emission regime in which the currency issued by the Bank of Portugal should be
covered by reserves of gold and foreign currency in a proportion of 50% (half in gold). This was the rule prevailing from 1950 to 1973 (Amaral, 2003).

This policy was important for banks (and the economy) for two main reasons. First, banks were not used to finance budget deficits and public debt, as in many other countries. In Belgium, France, and Italy, where fiscal imbalance was frequent, banks were forced to hold certain proportions of public bonds in their portfolios (Wyplosz, 1999). Second, it had the potential to influence almost directly the amount of money received as deposits by banks: the expansion or contraction of money emission according to the reserves of the Bank of Portugal, in turn determined by the balance of payments, should be the main cause of expansion or contraction of deposits in banks.

1.2 Banking regulation

The financial problems resulting from World War I had a serious impact on the banking system, with many banks trying to profit from the speculative environment of the period (Reis, 1995). The government sought to tame the situation with a new banking law in 1925. This law was quite similar to those then in place in the rest of the Western world. As did Portugal, and for similar reasons, most countries implemented quite restrictive legislation (a summary for various countries can be found in AAVV, 1994, and Cassis et al., 1995). The new rules in most countries called for a) the introduction of the principle of discretionary governmental authorization for the opening of banks, b) high capital requirements, c) liquidity requirements, and d) the establishment of interest rates determined by law. In most countries there was also an attempt to separate the investment and commercial activities of banks, as commercial banks in general had assumed a “universal” nature since the nineteenth century and had, thus, increased the interest and liquidity risks. The Portuguese legislation included all
these features, but never went so far as totally forbidding commercial banks from engaging in investment, as in the US or Belgium; and never went so far either as to fully nationalize the banking sector (as in Italy in the 1920s or in Austria in 1946) or even a large part of it (as in France or Germany in 1945).

In 1950 the law in place was still Decree 10,634, from 20 March 1925. The main features of this document, as well as the complementary legislation of 1935, are presented in the first two rows of Table I. It is easy to see that according to this institutional setting, banks had very limited freedom of action: deprived of an interest rate policy and forced to hold high cash reserves, they could not lend in the long run and could apply in stocks or bonds only a very limited portion of their resources. Also, if they wished to expand geographically through branches, the government’s authorisation was needed. It is possible (and this is an important idea of much of the literature on Portuguese banks) that such lack of freedom was somehow seen by them as advantageous, due especially to the protection of their position in the market. The rules making mergers or acquisitions as well as entries in the market also dependent of governmental authorisation might have contributed to such protection: since the market was not freely contestable, this gave banks an apparent free hand to engage in anti-competitive practices. Still, this requires some qualification: even if mergers, acquisitions, and entries were dependent of governmental authorisation they were not forbidden. This means that, although restricted, the threat of exclusion from the market still existed.

The institutional framework resulting from the combination of Decree 10,634 and Law 1,894 was criticized at the time on several bases. The first criticism came from Henry C. Wallich, an American economist working in the context of Marshall Aid, who wrote a report on the Portuguese financial system in 1951. According to Wallich (1951),
“Portugal’s credit system is well developed in some fields, less so in others. Facilities for short-term commercial bank credit are ample […]. [But] in the fields of agricultural and colonial credit, and of long term credit and capital for industry, much progress is still possible” (p. 9). Many Portuguese economists and political actors would later repeat the main thrust of this opinion. Pereira (1953) (one of the leading banking specialists of the time) noted that, “in terms of credit, the natural ability of Portuguese banks is concentrated in the short- and medium-run, as the liquidity principle limits strongly the use of capital for long-run periods” (p. 88) (similar observations can be found in Pereira, 1956a, and 1956b)1.

Many of these criticisms have been echoed in recent literature, such as Sérgio (1990), according to whom the Portuguese commercial banking system in the 1950s was defined by “excess liquidity […] and the apparently almost exclusive financing of commercial activity. […]. The protectionism in which the market lived and the restrictive rules in which the firms acted pushed competitors away and allowed them to obtain such high rents that they could operate in an environment of excess liquidity (without need to find profitable operations)” (p.)2. Valério (2010) also noted that “the restrictions put by the existing legislation and the dominant practices of the banks generated a situation of excess reserves that can be truly classified as structural” (p.)3.

Accurate or not, such criticisms inspired important legislative changes, even if they did not change the generally repressive nature of the regulations. The most important of these changes were laid down in a new legislation package aimed at a full reorganization of the banking system in 1957 and 1959, the main elements of which can be found in row 3 of Table I.

One further element of the legislative environment faced by the Portuguese banking sector that needs mention is its position within the corporatist institutions
typical of the *Estado Novo*. Since this regime defined itself as being “corporatist”, it sought to cover most social and economic activities with the appropriate institutions. Accordingly, the banking sector was granted a representative in the Corporatist Chamber, a consultative legislative body created in 1933. In 1935, a National Credit Council (*Conselho Nacional de Crédito*), where representatives of the Government and the banking sector should meet to deal with issues affecting the market, was created.\(^4\) Although this institutional environment had the potential of giving bankers an instance for exerting control over the market, the few indications we have are that the council never had a great role in disciplining it. Despite various agreements between bankers, they do not seem to have been respected (see below). In 1936, the official (corporatist) bankers’ association (*Grêmio Nacional dos Bancos e Casas Bancárias*) was created, devoted mostly to negotiating labour conditions with the sector’s unions, along with a limited role in coordinating the market\(^5\). In 1957 the Government authorized the creation of the Credit and Insurance Corporation.\(^6\) According to Valério (2010), the corporation had only “a negligible role in Portuguese banking life”.

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2. **Some preliminary indications of competition**

The new legislation of 1957-1959 was still repressive, but both the observers of the period and recent historians seem to suggest, nevertheless, that it offered, much as the 1925 legislation, a cozy environment for banks. Although not founded in any explicit theory, Sérgio’s (1990) idea that banks enjoyed such high rents that they could sit on a pile of cash reserves in excess of the legal requirement (something that is also stressed by Wallich, 1951, Pereira, 1953, 1956a, 1956b, and Valério, 2010) raises some issues.
First, the idea implies that banks somehow enjoyed some form of “excess profits”. Only under such conditions could they forgo income earned in credit instruments, keeping much of their assets in sterile cash reserves. Under perfect competition no existing agents in the market can influence the price, and profit maximization takes place at the point where marginal cost equals marginal revenue. “Excess profits” for such a long period as the one studied here can only exist, then, if marginal revenue consistently exceeds marginal cost, and this is only possible if some form of protected oligopoly exists. Under such conditions agents are able to determine either the price or the quantity of the product in the market, and this can happen only if there are high barriers to entry. Such barriers existed in the Portuguese banking market, as discussed above, in mainly two ways: high initial capital requirements and discretionary authorisation by the Government (which additionally had adopted a *cum grano salis* no-new-entrants rule). Under such conditions, particularly the rule preventing new entrants, it seems that Portuguese banks could have adopted anti-competitive practices without much fear of being put out of business. The only hard data the literature presents in favour of this idea, however, is the high cash ratio (excess reserves) of Portuguese banks. No figures on profits are presented and, consequently, no definition of what “excess profits” (or “rents”, in the words of Sérgio, 1990) would be, and how to interpret the existing profit rates.

We challenge such ideas in this and the next sections. Although not conveying the image of an environment of freedom, we nevertheless point to the presence of some form of competition. In this section we provide some preliminary indicators, with a more thorough analysis in the following ones.

In 1950 the Portuguese banking system comprised 22 incorporated commercial banks, 13 non-incorporated banking houses, and 20 savings banks (INEb, 1953).
Incorporated commercial banks dominated the market, accounting for roughly 69% of all deposits (up from 40% in 1938, cf. Roquette et al., 1968). Non-incorporated banks were residual, with a market share of about 1.5% (INEa, 1950). Most of the 20 savings banks were of small size, with the exception of the National Savings Bank (*Caixa Geral de Depósitos*). Savings banks accounted for about 30% of deposits but most of this came precisely from the *Caixa Geral de Depósitos* (CGD), which represented 90% of all deposits in savings banks and was the largest financial institution in the country, with a market share of around 27% in deposits (Figure 1). There were also 10 credit companies, among which only one was of significant size.

The seven largest commercial banks in 1950 (Figure 1) were BESCL, the market leader since 1947, with a share of deposits of roughly 18%, followed by BFSV, with roughly 13%, then BNU, with close to 11%, then BLA, with approximately 7%, then BBI, with almost 5%, and finally BPSM and BPA, both with about 3% - for the full name of the various banks, see Table II. The rest of the banks not listed here were all of a much smaller scale, and sometimes only regional.

The Hirschman-Herfindahl Index (HHI), a measure of market concentration, for deposits in the Portuguese commercial banks in 1950 (which excludes CGD) was 0.15 (Figure 2). The significance of this value in terms of market concentration has no immediate interpretation: did this represent a high, moderate, or low degree of concentration? There are no generally accepted standards of assessment, but the merger guidelines of the US Department of Justice can be used as a benchmark (US Department of Justice and Federal Trade Commission, 1982, and 2010). According to its latest version (of 2010), an HHI below 0.15 would correspond to a concentrated market (although moderately so)\(^7\).
The concentration ratios in Figure 3 (measuring the proportion of deposits appropriated by, respectively, the three, five, and seven largest commercial banks in Portugal), together with the international data in Table III, seem to corroborate this idea, as they show a degree of concentration that was lower than in Canada or the UK and not far from France or Spain.

Twenty three years later, in 1973, the banking structure had changed considerably. Commercial banks now held 80% of all deposits in the country (the remaining 20% being almost entirely held by CGD). The number of incorporated banks had dropped to 14 (down from 22) (Valério, 2010) and the number of non-incorporated banks to 7 (down from 13) (INEb, 1973) (this was not the result of failures, but of the transformation of non-incorporated banks into incorporated ones or from mergers and acquisitions).

The 1973 picture reflected the changes in the relative position of the seven largest banks that took place since 1950, as Figure 1 shows. In 1973 BESCL was still the market leader in deposits, but its share was now much lower (a little more than 12.5%). The subsequent positions were now occupied by the two smallest (among the seven larger) banks in 1950, BPSM and BPA. Both had jumped from a market share of approximately 3% of deposits to one that matched closely BESCL (roughly 12%) and had even been able to overtake BESCL for a few years (BPA between 1965 and 1969, a period in which it was the market leader, and BPSM in 1967 and 1968). The second bank in 1950, BFSV (which changed name to BFB after a merger in 1967, see Table II for full name of the banks, abbreviations and date of merger), with a market share of about 5%, was now the smallest, and even this market share was only possible thanks to the merger (BFSV reached its lowest share one year before the merger, in 1966). The third bank in 1950, BNU, was now fourth, with a lower share than in 1950 (more or less
9%\), and was accompanied by two banks of much lower size in 1950 (BLA, which meanwhile had changed its name to BTA also thanks to a merger in 1969, and BBI, see Table II for full name of the banks, abbreviations and date of merger).

A few aspects of the evolution just portrayed should be underscored: a) the threat to the market leader (BESCL) posed by two initially much smaller competitors but that proved to be considerably more dynamic throughout this period (BPA and BPSM); b) the persistent decline of what was, in 1950, the second most important bank in terms of deposits (and third in credit), BFSV; c) the decline of BNU, even if much less pronounced than that of BFSV (and still keeping the primacy in terms of credit); d) the interesting and dynamic behaviour of an initially small bank that was able to reach an intermediate position in 1973, BBI; and e) the decline of a bank of intermediate size in 1950 (BLA), which was rescued at the eleventh hour by the merger with an institution of similar characteristics, BT-A. We, thus, have, on the side of dynamism BPA, BPSM, and BBI, and on the side of decline, BFSV, BLA, and BNU. On top, we have BESCL, struggling to keep its position, with initial decline but apparent late recovery. For some aspects of the history of these banks, see Bessa-Luís (1969), Câmara (1972, 1985, and 1989), Sousa (1984), Damas and Ataíde (2004), and Valério (2010). All of this happened in a context of increasing importance of commercial banks, winning much away from CGD, which had now approximately 18% of market share.

The changes just outlined were reflected in a degree of concentration that fell between 1950 and 1973, as measured by both the HHI and the concentration ratios (Figures 2 and 3), especially until the early 1960s. The HHI passed from levels around 0.15 in 1950 to around 0.10 in the 1960s (and remained at that level in 1973). As for the concentration ratios, the decline was particularly pronounced in the CR3 indicator, showing that loss of market power took place essentially at the top end of the spectrum.
This is certainly a result of the erosion of BESCL’s position, thanks to the challenge posed by BPA and BPSM. The decline in CR3 is also explainable by a loss of market power of the three largest institutions as a whole. As a matter of fact, no other bank was capable during this period of reaching BESCL’s market power in 1950, and the three banks in the intermediate position, BNU, BBI, and BTA, were not so distant from the three largest ones in 1973. That is why the decline of CR5 is less pronounced than that of CR3 and the decline of CR7 is overall practically non-existent. By the end of the period the seven leading banks were still the same (although reflecting various mergers), but their order in terms of importance in the market had been radically altered.

Although apparently straightforward, measures of market concentration pose problems of interpretation when used as a proxy for competitive behaviour. Market concentration does not tell us if banks can exert effective market power, and for more than one reason: first, concentration may itself be the consequence of high competition; in this case, concentration would just be the outcome of a competitive process in which the most efficient institutions would have been able to drive the least successful ones out of the market. Consequently, a declining concentration would not necessarily indicate more competition. Also, even admitting that higher concentration by itself means market power, one needs to wonder about the level beyond which market power can be exerted. A further point is that a concentrated market may have other features (such as ease of entry, regulations, or technology) not allowing for anti-competitive behaviour on the part of the existing agents. Market concentration measures do not, therefore, confirm by themselves the existence (or lack) of competition. But they are a preliminary indicator, and the behaviour of the measures presented above do raise some questions regarding the idea of a “cosy” environment for Portuguese banks, in which
they could simply rest on their earlier achievements. Next, we will use a series of other indicators that are more explicit in this respect.

3. Liquidity, interest rates, deposits, capital, and profitability

3.1 Liquidity

Due to the importance attributed to it in the legislation and the literature, we start with the issue of cash reserves. Assessing the actual amount of cash reserves held by Portuguese banks in this period is not simple, due to a particular accounting issue. Until 1960, the law allowed banks to register in their books as cash reserves three types of assets: actual cash held in their vaults, deposits at the Bank of Portugal, and deposits in other commercial banks. In 1960 the General Inspection of Credit and Insurance imposed a new standardised system of accounting on banks in which deposits at the Bank of Portugal and in other banks were separated from each other. The issue is relevant because the Bank of Portugal was, since the 1930s, progressively withdrawing from the commercial market. Unfortunately, our knowledge of its operation in the postwar period is virtually non-existent. We know that in the 1930s and 1940s the bank was still an important player in the credit market, contributing to the money multiplier effect (Reis, 1999). But it is highly probable that changes were more pronounced after 1950, and that deposits at the Bank of Portugal increasingly became true idle reserves. What we do not know is the pace of the process, and one thing for which there is no doubt is that deposits in other institutions, despite being counted as reserves, entered in the credit cycle.

In order to partially correct for these problems, we calculate cash reserves held by banks in two different ways (Table IV). The first (Panel A of Table IV) shows cash
reserves as they were registered in the banks’ books, i.e. including true cash, deposits at the Bank of Portugal, and deposits in other banks until 1959. Here the pattern is clear: in 1950 all banks held reserves in excess of the legal limit by a large amount; however, the subsequent fall was steep, so that by the early-1960s that amount had converged to the legal limit. Panel B of Table IV presents the data in a different way: from 1960 on cash reserves are those registered in the banks’ books (and thus are equal to the data given in Panel A), but between 1950 and 1959 the deposits in other banks are skimmed from the overall figure through an estimate separating them from deposits at the Bank of Portugal. Now the figures are considerably different: the initial amount of reserves is much lower, even if still slightly above the legal limit. This means that most of the reserves held by commercial banks in excess of the legal limit in the 1950s corresponded in reality to deposits in other commercial banks. Even so, the downward trend (although milder) is still visible, and this method of accounting would suggest that not only did banks not hold the amount of excess reserves that is normally attributed to them, but also that they were already within (or very close to) the legal requirements by the early 1950s.

Which of these two ways accounts more correctly for the banks’ cash reserves hinges upon the amount of credit actually provided the Bank of Portugal, for which we currently do not have enough information. But the figures we have presented do raise the possibility that the often mentioned “structural problem” (Valério, 2010) of “excess reserves” was, to a large extent, simply an accounting problem. Portuguese commercial banks probably managed cash reserves in a much tighter way than usually acknowledged, thus questioning the traditional belief in excessive prudence.

3.2 Interest rates, deposits, and branches
Portuguese commercial banks were forbidden by law to have an autonomous price policy, as interest on deposits and credit were indexed to the Bank of Portugal’s rediscount rate (see Section 1 and Table I). The interest margin was, thus, ultimately decreed in an exogenous way by the Government.

However, when we look at the average interest rate practiced on deposits by the seven largest commercial banks, we find a not insignificant variance (Figure 4). The estimates presented here are the ratio (x100) of income from interest and commissions over the amount of deposits. A note should be made about these series. They do not correspond to precise figures of the average interest rate of the various banks, but to an estimate. There are two sources of imprecision. First, registration of deposits in the banks’ books are separated by just three (and sometimes only two) categories: demand deposits, time deposits, and small-time deposits; but there were many more interest rates, depending on the maturity of the time deposits (one month, three months, six months, one year, two years, more than two years). It is thus impossible to directly link the various rates with the various types of deposits. The second source of imprecision comes from the fact that in their books banks lumped together into a single accounting item income from interest and income from commissions.

Despite the imprecise nature of the data, they show remuneration policies differing from bank to bank, sometimes by a large amount (Figure 4). In the 1950s the difference between the bank paying the lowest average rate and the one paying the highest was between the lowest range of 0.5%-0.75% and the highest of 1.5%-1.75%-2%, and in the 1960s and 1970s the difference was similar, although at higher rates. It is easy to see that much of the difference was caused by the rates practised by BBI. But in the 1960s more banks adopted similar remunerations. And even if we do not take BBI’s rates in the 1950s into consideration, the differences continued to be significant
(sometimes the highest twice that of the lowest). Another bank that stands out in comparison with the others is BNU, although for the opposite reason of BBI: its consistency in paying the lower rates in the market. These two contrasting behaviours are easily explained by the nature of each of the banks: BBI was the dynamic financial arm of a business group, able to squeeze the financial margin in search of funds for other activities; BNU was a para-public institution that could pay low interest and still attract a large number of depositors, thanks to the implicit protection guarantee of state ownership.

If banks could not compete on the interest rates offered to depositors, the only explanation for the differences just reported must have lain in the types of deposits held in each bank, as time deposits were remunerated at a higher rate than demand deposits. Figure 5 shows that indeed the volume of time deposits differed between the various banks, even if increasing in all of them during the 1960s. Not surprisingly, taking into consideration the previous data on interest, BBI appears as the bank with the highest proportion of time deposits most of the time. In 1950 the seven banks under analysis could be classified into two groups in terms of holdings of time deposits: on the hand, we had BBI, BPA, BPSM, and BNU, with a higher proportion of time deposits; on the other, BESCL, BLA, and BFSV, with the lowest. This fits well with the picture above of the most and least dynamic banks. The initial exception is BNU, but it soon converged in the rest of the period to the pattern typical of the least dynamic. The most active in the process of attraction of time deposits were BBI, BPSM, and BPA. But all others also entered the race as time passed. In 1973 figures for the seven largest banks with respect to time deposits ranged between 35% and 50% of all deposits.

From the 1960s on the attraction of time deposits was, thus, an important instrument of competition. Until 1965 there was no legal restriction on the interest
asked on time deposits (the important legal restriction here being, of course, the one on credit, as banks could not offer rates on time deposits for which they could not find a match from the assets side). But the introduction of legal limits for rates on time deposits in 1965 did not halt their growth.

The idea of competition through time deposits is supported also by some qualitative data. Silva (1967) noted that, in the 1960s, “an increasing number of banks launched truly aggressive campaigns in order to attract depositors. Such campaigns would not have been very rewarding, however, if banks had not used the return associated to those deposits as an instrument. As a consequence [of the existing legal limits], the fight had to be concentrated in time deposits” (p.). Various banks seem to have even crossed the line of legality: “outdated rates have fostered [banks], in terms of liabilities [i.e. deposits], not to comply with the law or to go subtly around the spirit of the law” (Silva, 1968, p.)9.

In the 1960s complaints by banks about the legality of the practices of their competitors boomed. The meetings of the National Credit Council, where representatives of the various banks and of the Government met, overflowed with such complaints. In one of these meetings (June 1964), Fausto de Figueiredo, the representative of BFSV, could not have been clearer: “it is common knowledge [...] that legal dispositions [...] are not met” (GNBCB, 1964, p. 14). In another meeting, one month later, the Visconde da Merceana, representative of BNU, paraphrased an article in a Spanish magazine: in a year in which the maximum legal rates on time deposits were 3%, some banks paid 4%, 5%, 7%, and even, in the case of certain large accounts, 10%. According to the Visconde da Merceana, this was “the perfect picture of what is happening in Portugal” (GNBCB, 1964, p. 9)10.
The disregard for legal limits concerning interest rates was so serious that in 1967, under the Bank of Portugal’s sponsorship, all commercial banks plus six banking houses signed an “Agreement on the Discipline of Banking Activity” (“Compromisso relativo à disciplina da actividade bancária”) (GNBCBe, 1967), in which they pledged to respect those limits. One year later, however, under the argument that the agreement was not being respected by competitors, BESCL withdrew from it (Damas and Ataide, 2004). In 1970 a new agreement was signed (GNBCGc, 1970), but the lack of respect for this document was universal. Figure 4 shows precisely this: in 1969 all average interest rates of the various banks converged to the same value. But in 1970 the difference between them had widened again, and continued to do so until 1973.

But there are even clearer indications of the practice. An exercise in the style of Pons (2001) reveals that the largest seven Portuguese commercial banks as a group paid effective average interest rates that were higher than those established by the law (Figure 6). The rates identified in the figure as “effective” are the interest rates effectively paid by the seven largest banks on average. The rates identified as “legal” are the ones they should have paid in case they had respected the legal limits. Both are average rates, balancing for the different weight of demand and time deposits held by the banks. The calculations presented in Figure 6 are very simple: for effective rates, the amount of income paid by the banks in interest was divided by the amount of deposits they held, as in the case of Figure 4. Two caveats already mentioned above should be borne in mind: a) banks’ books in this period did not separate interest payments from payments in the form of commissions; b) although we have information on the legal rates for the various types of time deposits (from one month to two years), the banks’ books did not separate between them, classifying them only as time deposits (occasionally separating them from small-time deposits). For this reason, the procedure
to calculate legal rates was a little more complex: first, an average of the legal rates on
time deposits was calculated for each year; then, this average was weighted by the
proportion of time deposits held by the banks; the result was then added to the legal rate
for demand deposits weighted by the proportion of demand deposits held by the banks.
Despite the obvious imperfection of the method (due to the data constraints), it does
look like banks paid effective interest rates above the legal ones (a result similar to that
found by Pons, 2001, for Spain in a similar period).

Interest was not the only instrument used by banks to attract deposits. Another
very important one was geographical expansion, typical of markets where competition
is otherwise limited. There was throughout this entire period a rush for the opening of
branches, particularly in the second half of the 1960s. Available aggregate data are very
patchy, but they still convey a picture of strong growth. According to Sérgio (1990),
between 1950 and 1959 the Government authorized the opening of 121 branches.
Pintado and Serra (1966) count 364 branches in 1965 and 539 in the following year, i.e.,
an increase of 165. This means that in one single year more branches were opened than
during the entire 1950s. According to Carvalho (1973), the number of branches had
grown to 778 in 1972, more than twice the number of 1965.

Aggregate data are difficult to obtain, but we have built series for the branches of
the seven largest banks under analysis. Figure 7 shows the results, confirming the
general impression of growth. BNU was undoubtedly the bank with the largest presence
in the country since the 1950s. BESCL was second, but never acquired such a vast
network as BNU. This confirms the idea that these were the only banks having a true
national dimension at the beginning of our period of study. BPA displays the most
consistent growth, very much connected with its strategy of capturing popular savings
in large cities as well as in small towns. By the 1960s its network was the size of
BESCL’s. Although growing as much as BPA in the 1960s, BPSM increased its network of branches more slowly. This is related with its concentration (contrary to BPA) in a more urban clientele. BBI also shows strong growth, with an expansion close to that of BPSM in the 1960s, although slower than BPA. BLA shows modest growth until the late 1960s, but with a sharp jump in 1970, almost doubling its network thanks to the merger with BT-A, allowing it to catch up with BESCL and BPA. Finally, there is the case of BFSV, which remained outside of the branch rush until 1967, with just one office until 1965 (in Lisbon), and two in 1966 (with the new Porto office). Only the merger with BB allowed BFSV to acquire a network of branches, and even then smaller than the rest of the big seven.

Lack of competition between banks would have been translated into high interest rate margins. Figure 8 shows the financial margin (the difference between income earned and paid on interest) of the banks analysed. These figures are subject to the same sort of shortcomings as the data on interest presented above: they lump together income from interest and commissions. Another shortcoming is that the data start only in 1960, the reason for this being that most banks were not forced by law to publish income earned from credit instruments until that date. Still, they show an interesting picture, namely one of substantial differences throughout the period. Again, not surprisingly, the bank with the closest margin was BBI, and also not surprisingly, the one with the largest was BNU. We have seen above that the latter generally practised the lower rates on deposits, and the former the higher ones. The margins of other banks fell between the two extremes, although BPA converged to lower levels in the last years of the period. Was this high or low? Table V provides some figures for other countries. The Portuguese values fall within the norm.
3.3 Capital

The idea of lack of competitive behaviour of Portuguese banks in this period may be questioned by still other data, such as the banks’ capital ratios. Note that the legislation of the time did not establish proportional limits but rather absolute amounts (see Section 1 and Table I). When we look into the capital-assets ratios of the banks under analysis, they reveal increasingly higher leverage (Figure 9). Well capitalised in 1950 (in a range between 7.5% and 11% of their assets, if we exclude BNU) their capital ratios fell steadily throughout the period, so that by 1973 all of them had ratios below 5% (between 3% and 4.8%).

The only exceptions to the generalised pattern shown in Figure 9 are BNU and BFSV. BNU was consistent in having the lowest capital ratio of all banks, something most probably explainable by its “advantage” as a semi-public institution. Such status, implying the impossibility of bankruptcy, meant that it did not need to show any special solidity in order to be trustworthy to clients. BFSV represents the almost opposite case: being a unit bank unwilling to expand geographically when all other banks were entering the race, it preferred to invest in solidity, setting it apart from other banks in this respect. The more the competitors expanded geographically, the more BFSV had to increase its capital, to retain and attract depositors. As we will see next, this had very serious implications for profitability and ultimately forced the bank to change strategy, when it merged with BB. After that moment the bank’s capital ratio converged quickly to the general pattern. If we disregard BFSV, the capital ratios of Portuguese did not set them apart in international terms (Table VI).

3.4 Profitability
The argument over the excessively protected environment in which Portuguese banks lived rests ultimately on the issue of profitability. The figures for the return on equity (ROE) of the seven largest commercial banks presented in Figure 10 are the published after-tax profits calculated as a ratio of equity and reserve funds (x100). When we compare them with what we know from other countries (Table VII), they do not stand out as different, quite the contrary. The exception is, again, BFSV, with its low record, something mostly explainable by the extraordinarily high capital ratios it had as a consequence of its unit-bank strategy. A visible feature of ROE of Portuguese banks is its decline during the 1960s, coinciding with the rush for branches and deposits, thus suggesting that more competition led to the squeezing of the banks’ profit margins. If, in 1965, ROE of Portuguese banks ranged more toward the high end of the international spectrum, the opposite occurred in 1973 (Table VII). Figures for return on assets (ROA) in Figure 11 provide an even clearer picture of the connection between profits and a higher cost structure. These figures show two movements: on the one hand, convergence between, and on the other, consistent decline of ROA of the various banks, both taking place essentially in the 1960s. The international comparison in Table VIII shows again that the behaviour of Portuguese banks was not dissimilar to other countries.

These figures look low, particularly for a somewhat underdeveloped financial system as the Portuguese one. They require, thus, a few words of caution. Despite their importance, the truth is that data on profitability are, in general, very difficult to obtain with accuracy, as accounting standards and practices allow for much imprecision. Capie and Billings (2001), for instance, have revealed the significant extent to which the reported profits of the English clearing banks in the twentieth century differed from true ones. The main source of divergence were the unreported (publicly, although reported
secretly) “hidden reserves”. Capie and Billings (2001) could only establish the importance of these reserves thanks to a reconstruction of the banks’ profits-and-loss accounts based on unpublished data from the banks’ archives. This is something we cannot provide at this stage for Portuguese commercial banks. We must, as a result, simply rely on published data. When other information from unpublished archival material becomes available it will be possible to compare it to our figures.

Thus, the possibility exists that the profit rates just reported are not the “true” ones. But another way of interpreting them is to think that they might reflect lower opportunities to find profitable operations. The banks’ financial margins were almost entirely set by the Government in an administrative way and alternative assets (such as stocks and bonds) could only be used in a residual way. As increased competition led to higher costs related to the efforts to attract depositors (higher interest paid on time deposits, lower interest asked on loans, and higher real estate and personnel costs in new branches), perhaps the registered low profitability was just a reflection of the fact that not much room was left for banks to increase their margins.

Even if these figures will be revised by later findings of unpublished data in banks’ archives, they raise doubts about the idea common in the literature that Portuguese banks were granted “excess profits” by the existing institutional environment. But these are topics requiring much more detailed study in the future.

**Conclusion**

We have shown in this paper that despite the legal restrictions existing in the period 1950-1973, Portuguese commercial banks found various ways of competing with each other. This raises doubts about the idea, common in the literature, that they lived in a “cosy” environment based on “rents” and “excess profits”. The reversals of fortune of
several of the main banks show that their position in the system was not granted once and for all. And the comparisons with banks in much of the western world, despite all the problems involved in these comparisons, suggest that they did not live in an especially protected environment by international standards.

The picture we have drawn here is, however, essentially an impressionistic one. Any agenda for future research needs to go beyond this and provide more formal tests of the degree of competition. A test of the Panzer and Rosser (1987) type is already under preparation. But other topics are also worth attention: we have seen that much of the evolution of Portuguese banks in this period depended on discretionary measures of the Government, such as entry in the market, the opening of branches, and the establishment of interest rates. Future works should analyse the political economy dimension present in the relationship between Government and banks. A thorough study of the structure of credit is also needed. The banks’ published accounts do not allow for detail in this respect. Knowledge of their actual credit policy will have to rely on yet unpublished material lying in the banks’ historical archives, although we cannot be sure right now of the existence of relevant data on such unpublished material. This is precisely one last point in any agenda for future research. Not many banks have historical archives, and many of those that have provide only disorganized material. Still, individual histories of those banks having good archival material would certainly be illuminating.
Table I
Main elements of Portuguese banking legislation, 1925-1973

<table>
<thead>
<tr>
<th>Capital requirements</th>
<th>Interest rates</th>
<th>Cash reserves</th>
<th>Credit</th>
<th>Stocks and bonds holdings</th>
<th>Entry in market</th>
<th>Mergers &amp; acquisitions</th>
<th>Branches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decree 10,634 29 March 1925</td>
<td>500,000 gold-escudos for incorporated banks; 250,000 gold-escudos for non-incorporated banks opening or functioning in Lisbon or Porto; 200,000 gold-escudos and 100,000 gold-escudos, respectively, for banks outside Lisbon and Porto</td>
<td>Interest on demand deposits: 50% of the Bank of Portugal’s rediscount rate; interest on loans: not more than 1.5% above that same rediscount rate; no limits on time deposits</td>
<td>Equal to at least 20% of demand deposits, with the remaining 80% backed by credit instruments of no more than three months’ maturity</td>
<td>Forbidden to grant credit above 10% of the bank’s capital to any individual or firm</td>
<td>Authorisation by the Minister of Finance</td>
<td>Authorisation by the Minister of Finance</td>
<td>Opening dependent of authorisation by the Minister of Finance</td>
</tr>
<tr>
<td>Law 1,894 11 April 1935</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Frozen until 1940 (in practice until 1974)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decree-Law 42,641 12 November 1959</td>
<td>50 million escudos in Lisbon and Porto; 20 million outside of the two cities; both for opening banks; 30 million escudos for incorporated banks functioning in Lisbon or Porto, and 10 million for those functioning outside the two cities; 10 million escudos for non-incorporated banks in Lisbon and Porto; 5 million outside of the two cities</td>
<td>No change in relation to Decree 10,634</td>
<td>Equal to at least 15% of demand deposits and of time deposits of less than one month; and 5% of time deposits of more than one month, with the remaining 85% backed by credit instruments of no more than three months’ maturity and no less than one year (slight changes until 1973, cf. Valério, 2010)</td>
<td>Forbidden to grant credit above 10% of the bank’s capital plus the reserve fund to any individual or firm; this limit can be raised to 30% if the collateral is constituted of public bonds; and to 20% if it has the form of bank guarantee</td>
<td>No change in relation to Decree 10,634</td>
<td>No change in relation to Decree 10,634</td>
<td>No change in relation to Decree 10,634</td>
</tr>
<tr>
<td>Decree-Law 46,492 18 August 1965</td>
<td>For the first time limits on rates for time deposits. 0.5% for demand deposits; 1.25% for time deposits of less than thirty days; 2.5% for time deposits between thirty and ninety days; 3.5% for deposits between ninety days and one year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Figure 1
Market share of deposits of the seven largest commercial banks and the Caixa Geral de Depósitos, 1950-1973 (%)

Table II
Full name, abbreviations and mergers of the seven largest commercial banks, 1950-1973

<table>
<thead>
<tr>
<th>Full name: Banco Espírito Santo &amp; Comercial de Lisboa</th>
<th>Full name: Banco Fonsecas, Santos &amp; Viana</th>
<th>Full name: Banco Nacional Ultramarino</th>
<th>Full name: Banco Lisboa &amp; Açores</th>
<th>Full name: Banco Borges &amp; Irmão</th>
<th>Full name: Banco Pinto &amp; Sotto Mayor</th>
<th>Full name: Banco Português do Atlântico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbreviation: BESCL</td>
<td>Abbreviation: BFSV</td>
<td>Abbreviation: BNU</td>
<td>Abbreviation: BLA</td>
<td>Abbreviation: BBI</td>
<td>Abbreviation: BPSM</td>
<td>Abbreviation: BPA</td>
</tr>
<tr>
<td>Merged in 1967 with: Banco Burnay</td>
<td></td>
<td></td>
<td>Merged in 1969 with: Banco Totta-Aliança</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abbreviation: BB</td>
<td></td>
<td></td>
<td>Abbreviation: BT-A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resulted in: Banco Fonsecas &amp; Burnay</td>
<td></td>
<td></td>
<td>Resulted in: Banco Totta &amp; Açores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abbreviation: BFB</td>
<td></td>
<td></td>
<td>Abbreviation: BTA</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2
Market concentration in Portuguese commercial banking (Hirschman-Herfindahl Index, deposits), 1950-1973

Note: until 1959 the value of deposits in each bank was published in INEc; after that date this publication disappeared, and the data had to be retrieved from the banks’ annual accounts.


Figure 3
Concentration ratios in Portuguese commercial banking (deposits), 1950-1973 (%)

CR3: deposits held in the first three largest banks; CR5: deposits held in the first five largest banks; CR7: deposits held in the first seven largest banks.

Sources: see Figure 3

Table III
Concentration ratios, various countries (CR5) (deposits), 1950-1975 (%)

<table>
<thead>
<tr>
<th></th>
<th>Canada</th>
<th>UK</th>
<th>France</th>
<th>Spain</th>
<th>Germany</th>
<th>Japan</th>
<th>USA</th>
<th>Portugal</th>
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<tr>
<td>1950</td>
<td>80</td>
<td>84</td>
<td>66</td>
<td>68</td>
<td>-</td>
<td>31</td>
<td>13</td>
<td>76</td>
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<tr>
<td>1955</td>
<td>80</td>
<td>84</td>
<td>70</td>
<td>65</td>
<td>27</td>
<td>29</td>
<td>14</td>
<td>70</td>
</tr>
<tr>
<td>1960</td>
<td>83</td>
<td>83</td>
<td>65</td>
<td>64</td>
<td>24</td>
<td>26</td>
<td>15</td>
<td>65</td>
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<tr>
<td>1965</td>
<td>86</td>
<td>81</td>
<td>66</td>
<td>58</td>
<td>25</td>
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<tr>
<td>1970</td>
<td>85</td>
<td>85</td>
<td>57</td>
<td>57</td>
<td>24</td>
<td>21</td>
<td>16</td>
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<tr>
<td>1975</td>
<td>81</td>
<td>70</td>
<td>60</td>
<td>51</td>
<td>24</td>
<td>20</td>
<td>18</td>
<td>67*</td>
</tr>
</tbody>
</table>

* 1973

Source: For Portugal, see Figure 3; for the remaining countries Revell (1987), except Spain, Pueyo (2003).
Table IV
Cash reserves in Portuguese commercial banks, 1950-1973 (% of overall deposits)

<table>
<thead>
<tr>
<th>Year</th>
<th>BESCL</th>
<th>BFSV/BFB</th>
<th>BNU</th>
<th>BLA/BTA</th>
<th>BBI</th>
<th>BPSM</th>
<th>BPA</th>
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<tbody>
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<td>31.28</td>
<td>30.21</td>
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<td>31.60</td>
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<tr>
<td>1951</td>
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<td>26.29</td>
<td>30.45</td>
<td>26.37</td>
<td>23.53</td>
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<tr>
<td>1952</td>
<td>25.24</td>
<td>27.66</td>
<td>32.68</td>
<td>25.22</td>
<td>27.32</td>
<td>26.90</td>
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<tr>
<td>1953</td>
<td>36.29</td>
<td>33.55</td>
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<tr>
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<td>29.89</td>
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<td>23.05</td>
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<td>43.77</td>
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<td>15.68</td>
</tr>
<tr>
<td>1961</td>
<td>14.75</td>
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<td>26.01</td>
<td>15.39</td>
<td>14.29</td>
<td>22.75</td>
<td>17.32</td>
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<tr>
<td>1962</td>
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<td>15.42</td>
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<td>17.02</td>
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<td>17.53</td>
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<td>1965</td>
<td>11.61</td>
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<td>16.81</td>
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<td>11.25</td>
<td>16.59</td>
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<td>1968</td>
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<td>18.68</td>
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<td>1970</td>
<td>14.87</td>
<td>16.00</td>
<td>17.35</td>
<td>20.08</td>
<td>17.61</td>
<td>15.76</td>
<td>13.40</td>
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<td>1971</td>
<td>13.45</td>
<td>19.74</td>
<td>17.08</td>
<td>20.10</td>
<td>14.99</td>
<td>13.73</td>
<td>13.43</td>
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<tr>
<td>1972</td>
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<td>16.31</td>
<td>16.44</td>
<td>18.38</td>
<td>18.07</td>
<td>17.44</td>
<td>13.75</td>
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</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>BESCL</th>
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<th>BNU</th>
<th>BLA/BTA</th>
<th>BBI</th>
<th>BPSM</th>
<th>BPA</th>
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<td>1973</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Note: Until 1959, commercial banks’ annual reports separated only cash from deposits in other banks, in these being included the Bank of Portugal. Thus, in order to separate deposits at the Bank of Portugal from those in other banks, we had to use the Bank of Portugal’s annual reports. The figures in these reports are not disaggregated by bank. To obtain the estimate presented here an aggregate ratio of deposits at the Bank of Portugal and in other banks was calculated. This ratio was then applied to the figures provided in the various banks’ annual reports (the ones in Panel A). The assumption is that the proportion between deposits at the Bank of Portugal and deposits in other banks was, for each year, the same in all banks.


Figure 4
Average interest rate on deposits (seven largest commercial banks), 1950-1973 (%)

Sources: see Table II.
Figure 5
Proportion of time deposits in total deposits (seven largest commercial banks), 1950-1973 (%)

Source: see Table II

Figure 6
Average effective and legal interest rates, commercial banks, 1950-1973

Figure 7
Number of branches of the seven largest banks, 1950-1973

Source: see Table II

Figure 8
Financial margin (interest margin/total assets) (seven largest commercial banks), 1960-1973 (%)

Table V
Financial margin (interest margin/total assets) (commercial banks), various countries, 1965-1973 (%)

<table>
<thead>
<tr>
<th></th>
<th>1965</th>
<th>1970</th>
<th>1973</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>1.71**</td>
<td>1.44</td>
<td>0.54</td>
</tr>
<tr>
<td>Canada</td>
<td>2.12*</td>
<td>2.06</td>
<td>2.16</td>
</tr>
<tr>
<td>Denmark</td>
<td>3.89*</td>
<td>4.65</td>
<td>4.91</td>
</tr>
<tr>
<td>Finland</td>
<td>2.47</td>
<td>2.49</td>
<td>2.67</td>
</tr>
<tr>
<td>Germany</td>
<td>2.19***</td>
<td>2.24</td>
<td>1.83</td>
</tr>
<tr>
<td>Italy</td>
<td>2.82</td>
<td>2.72</td>
<td>2.50</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2.46</td>
<td>2.42</td>
<td>2.50</td>
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<td>Norway</td>
<td>2.72</td>
<td>2.97</td>
<td>3.00</td>
</tr>
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<td>Spain</td>
<td>2.79***</td>
<td>2.73</td>
<td>2.71</td>
</tr>
<tr>
<td>Sweden</td>
<td>2.48***</td>
<td>2.19</td>
<td>2.36</td>
</tr>
<tr>
<td>USA</td>
<td>2.71</td>
<td>3.19</td>
<td>2.76</td>
</tr>
</tbody>
</table>

*1966
**1967
***1968

Australia – trading banks; Canada – chartered banks; Denmark, Finland, and Italy – all banks; USA – FDIC insured; all other countries – commercial banks

Source: Revell (1980)

Figure 9
Capital-assets ratio (seven largest commercial banks), 1950-1973 (%)

Source: see Table II
Table VI
Capital-assets ratio, Portugal and various countries (commercial banks), 1965-1973 (%)

<table>
<thead>
<tr>
<th>Country</th>
<th>1965</th>
<th>1970</th>
<th>1973</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>5.03</td>
<td>5.55</td>
<td>4.23</td>
</tr>
<tr>
<td>Belgium</td>
<td>5.14*</td>
<td>4.54</td>
<td>3.39</td>
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<td>3.25</td>
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<td>3.55</td>
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<td>6.78</td>
<td>8.27</td>
<td>7.55</td>
</tr>
<tr>
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<td>-</td>
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<td>4.68</td>
<td>5.32</td>
</tr>
</tbody>
</table>

*1966
**1968
***1971

Notes: assets are not weighted by risk
Australia – trading banks; Canada – chartered banks; Denmark, Finland, France, and Italy – all banks; USA – FDIC insured; all other countries – commercial banks
Sources: for Portugal – INEa; for all other countries – Revell (1980)
Table VII
Return on equity, Portugal and various countries (commercial banks), 1965-1973 (%)

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<th></th>
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<th>1970</th>
<th>1973</th>
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<td>17.32</td>
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<td>37.27</td>
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<tr>
<td>Denmark</td>
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<td>15.30</td>
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<td>12.43</td>
<td>9.55</td>
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<td>France</td>
<td>7.96</td>
<td>11.78</td>
<td>18.34</td>
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<td>13.57</td>
<td>10.91</td>
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</tbody>
</table>

*1966
**1968
***1971

Australia – trading banks; Canada – chartered banks; Denmark, Finland, France, and Italy – all banks; USA – FDIC insured; all other countries – commercial banks
Sources: see Table IV

Figure 11
Return on assets (seven largest commercial banks), 1950-1973 (%)

Source: see Table II
Table VIII

Return on assets, Portugal and various countries (commercial banks), 1965-1973

<table>
<thead>
<tr>
<th></th>
<th>1965</th>
<th>1970</th>
<th>1973</th>
</tr>
</thead>
<tbody>
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<td>Australia</td>
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<td>1.00</td>
<td>0.95</td>
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<td>Belgium</td>
<td>0.55*</td>
<td>0.54</td>
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<td>Canada</td>
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<td>1.10</td>
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<td>Denmark</td>
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<td>1.61</td>
</tr>
<tr>
<td>Finland</td>
<td>0.98</td>
<td>0.59</td>
<td>0.62</td>
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<td>France</td>
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<td>1.01***</td>
<td>0.62</td>
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<td>Italy</td>
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<td>0.89</td>
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<td>Norway</td>
<td>0.94</td>
<td>0.96</td>
<td>0.77</td>
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<tr>
<td>Spain</td>
<td>1.58***</td>
<td>1.63</td>
<td>1.76</td>
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<td>Sweden</td>
<td>0.78***</td>
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<td>Portugal</td>
<td>0.46</td>
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<td>0.31</td>
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</tbody>
</table>

*1967
**1966
***1968

Notes: Australia – trading banks; Canada – chartered banks; Denmark, Finland, and France – all banks; USA – FDIC insured; all other countries – commercial banks

Sources: see Table IV
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Notes

1. Translation by the author.
2. Translation by the author.
3. Translation by the author.
4. Law 1,894, 11 April 1935.
7. We should also note that this measure was 0.10 in Spain in 1950 (Pueyo, 2003), 0.16 in Italy in 1930 (Ciocca and Biscaini Cotula, 1979), of a similar level in England and Wales in 1920 (Capie and Rodrik-Bali, 1982), and 0.18 in Canada in 1927, after a strong process of concentration in the 1920s (Bordo et al., 1995).
8. An important note should be made here: cash reserves are calculated as a proportion of all sorts of deposits (demand and time). This is important because most of the considerations normally made in the literature about excess reserves refer only to cash reserves as a proportion of demand deposits. But, as Figure 5 shows, demand deposits became an increasingly smaller proportion of overall deposits in this period, and the legal requirements for time deposits were much less stringent than those for demand deposits.
9. Translation by the author.
10. Translation by the author.