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War and Economics: Spanish Civil War Finances Revisited

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Abstract: This paper reviews how the Spanish civil war was financed. We present new evidence to show that the two combatant parties, the Republican government and the Franco administration followed similar financial strategies. In both cases money creation, rather than new taxes or the issue of debt, was the main mechanism used to cover the expenses of the war. We argue, contrary to the established knowledge, that both sides consumed a similar amount of domestic and foreign resources. We also argue that the Spanish Republic did not lose the war because of a lack of means. International factors, such as the Non-Intervention agreement promoted by France and Great Britain, and the military setbacks of the Republican army during the first year of the war, were decisive for Franco's victory in 1939.

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War and Economics: Spanish Civil War Finances Revisited (*).

Economic conditions affect the development and outcomes of wars. In particular, the amount of resources available to the warring parties is usually a determinant of the final result. An advantage in resources can be readily transformed into military superiority in order to better meet the needs not only of the war effort, but also of the rearguard, essential for keeping up the moral of the population. Resource superiority usually reflects a higher level of economic development, which in turn allows for greater flexibility in adapting the productive structure to the necessities of the war.

This argument has been confirmed for the case of the two world wars where the final outcome has been considered “primarily a matter of levels of economic development of each side and the scale of resources that they wielded”¹. This was also certainly the case of the American civil war, where the Union’s more developed markets and industrial base are considered key factors in the final outcome of the conflict, as the North was able to spend roughly twice as much on the war effort as the South².

The Spanish civil war seems to contradict this general conclusion. When civil strife started in July 1936 and the Spanish economy was divided in two, most of the industrial base and the financial wealth were concentrated in the area controlled by the legitimate Republican government. And yet the Republicans lost the war three years later, when in March 1939 General Franco’s Army claimed total victory over a demoralized Republican Army. The prevailing explanation for this apparent contradiction has been that the Republican defeat was partially due to a gross mismanagement of the resources at their disposal. This interpretation originated from a report published in 1940 by the Francoist minister of Finance and former head of the research department of the Bank of Spain, José Larraz³. In his report, Larraz sustained that both parties spent a great deal, although he pointed out that the Republican government spent larger sums than the so-called national government. The document

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¹ Broadberry and Harrison (2005) and Harrison (1998).

² Ramson (2001) and the references there provided.

pointed out the "squandering" of "red finances" in contrast to the austerity of "national finances". The "Larraz Report" was intended to demonstrate how Franco's economic authorities managed the economy in efficient and orthodox fashion, while the Republicans pillaged and wasted the real and financial resources of the country. Larraz's report has since been the basis of every account explaining the financing of the war.

We argue that, contrary to the established knowledge, there was not much difference between the two sides, either in the quantity of funds spent or in their financial strategies. Both sides were forced to resort to all possible means to meet the huge expenditure requirements of the three years of conflict. Taxes, requisition, confiscation, payment moratoria, sale of assets, borrowing and money creation were used to finance the war effort. External sources were also significant. Franco borrowed from Germany and Italy, while the Republicans depleted their holdings of foreign exchange reserves. All in all, the two parties spent similar amounts. We also argue that external factors and the course of the war, and not the economic management on behalf of the Republican Government, were the determinant factors that explain the final result of the war. While Hitler and Mussolini sustained Franco, the Republicans did not have the support of the democratic nations and only Stalin was ready to supply them with arms. Moreover, the Republicans' continuous military setbacks during the first year reduced their economic power and that tilted the economic balance in favor of the rebel administration and army.

This paper reviews how the Spanish civil war was financed. We present new evidence and new data that allow us to provide a detailed and more balanced analysis of the financial strategy and the volume of resources employed by the two combatant parties. The first section presents background information. The second section examines the internal and external sources used by both the Republican Treasury and Franco's administration to cover the cost of the war. The third section provides quantitative evidence of war expenditures on both sides. The fourth section explores the relationship between money and prices and the paper ends with some brief conclusions⁴.

³ Preliminary summary of the evolution of the Treasury from 18th July, 1936 to the present Ministry of Finance (1940). In what follows we will use the term 'Francoists' or 'nationalists' -as the Franco side has been also called- indistinctively.

⁴ Since the publication of the Larraz report, much research has been done on this subject. Building on fresh research, R. Hubbard (1953) was the first author to approach the issue and showed that Franco financed the war essentially with German and Italian long-term credits. Angel Viñas (1976, 1977, 1984), in two books and various articles, has done much to illuminate the central questions about the financial

1. Spain at War: 1936-1939

The civil war has been one of the most significant events in the history of contemporary Spain. The war lasted nearly three years, from July 1936, when a military coup attempted to overthrow the constitutional government of the Second Republic, to March 1939. The war finished with the establishment of an authoritarian and undemocratic regime that introduced vast changes into Spanish society. Furthermore, the military rebellion of July 1936 put an end to a long period of parliamentarism and interrupted a slow but continuous process of economic modernization that since 1900 had seen the Spanish income per capita converge with that of the most advanced European nations.

On the eve of the war, Spanish industry, armed forces and diplomacy were entirely unprepared for any kind of war, civil or international, short or long. In 1935, the level of public expenditure stood at around 13 % of GDP. Reported military spending was low, at around 16 % of total budget expenditure⁵. The quantity and quality of the military equipment and supplies was clearly insufficient to wage a long confrontation. The rebel forces planned a *coup d'état* and expected to seize power in a few days. But as the Republic did not crumble, the military coup turned into a drawn-out and devastating war⁶.

The military uprising split the country in two, each with its own separate government. The war broke the financial and monetary union of the country. Although the headquarters of the main banks and saving banks remained in the territory under the control of Republican authorities, many branches and a large number of regional and local financial institutions operated independently in the area occupied by the military

requirements of the war. He examined how the Republicans financed their civil and military purchases abroad by depleting the huge gold reserves of the Bank of Spain and how Franco received most of his resources from Germany, Italy and also from financiers in Portugal and Switzerland. Whealey (1986) has also studied how Franco obtained the resources to finance his Army. Thanks to García Pérez (1994) and Leitz (1996), we have a good knowledge of the trade relationship between Franco's Spain and the Third Reich. Delgado (1980) and Oliveira (1987) have looked at the Portuguese commercial and financial connections, and Giura (2002) has focussed on the relevance of Italian aid. Sánchez Asiaín (1999) has done extensive work on the economy of the civil war, paying special attention to monetary and banking issues. More recently Martín-Aceña (2001, 2008) reviewed the much debated question of the gold reserves of the Bank of Spain and has cast doubt over how timely and convenient it was to employ the reserves the way this was done. The latest and most comprehensive contributions are Pons (2006), with a "state-of-the-art" study of both Republican and Franco's finances and also Comín and López (2008) and Martorell and Comín (2008).

⁵ Data in Comín and Diaz Fuentes (2005)

⁶ The literature on the Spanish Civil War is almost unlimited and therefore impossible to list here. The most recent contributions are included in Malefakis (2006) and Fuentes Quintana (2008).

forces commanded by general Franco. Two central banks (one in Madrid and another in Burgos) and two "pesetas" (the former Spanish currency) coexisted during the war. Financial institutions on both sides were closely supervised. Moreover, Republican authorities suspended the operations of the Stock Exchange, took measures to defer the redemption and payment of interest on public debt and declared a moratorium on bank mortgages. They also introduced rigorous foreign exchange controls and enforced strict measures to regulate the financial system. The Franco administration adopted similar measures: price and exchange controls were introduced and the financial system was subjected to strict regulations⁷.

On paper, with more developed markets and an industrial base that could ultimately produce the goods needed for war, the Republican government was clearly in a better position to face the challenge of mobilizing resources and defeating the rebels. The Republican territory encompassed 60 per cent of the country's population (around 14 million inhabitants), the main commercial cities (Madrid, Barcelona, Bilbao, Valencia), practically the entire industrial base concentrated in Catalonia, the Basque country, Asturias and the main agrarian exporting area in the Mediterranean coast. They also controlled the central administration apparatus and had a financial advantage that included all the metallic (gold and silver) reserves of the Bank of Spain. The rebels, on the other hand, had virtually no manufacturing industry to produce military supplies and without any initial financial resources relied entirely on private donations and on funds borrowed from abroad to purchase foreign supplies. The only initial advantages Franco had were the control of large grain producing regions and the support and aid of many entrepreneurs, firm managers and financiers that jumped into the rebel zone immediately after the outbreak of the war.

However, the initial advantages of the Republic soon began to vanish. Firstly, because of internal political conflicts within its own territory. In the first weeks of the war, the central government had to face a revolutionary movement led by socialist and anarchist trade unions and by independent and uncontrolled peasants and workers' committees. In Catalonia and the Basque country, separatist groups claimed total independence and authorities in Barcelona and Bilbao demanded more political autonomy assuming "de facto" legislative powers until then in the hands of the Spanish Parliament in Madrid. The central government was overrun by all these events, its

⁷ A comprehensive analysis of the Spanish economy during the war can be found in Martín-Aceña and Martínez Ruiz (2006)

power was reduced and its legitimacy undermined. In contrast, the generals that commanded the rebellion avoided the political turmoil that plagued the Republicans. They suppressed all workers' organizations and political parties, imposed strict domestic order and militarized the industrial infrastructure in its zone. That does not imply they had a plan to organize a war economy. Rather the unexpected resistance of the Republic surprised the rebels and they were forced to establish a brand new administration with serious coordination problems and disagreements about the best economic strategy to follow.

Secondly, the international scenario in the 1930s did not help the Republic's cause. The "non-intervention accord" promoted by Paris and London and signed in the month of September 1936 by 34 nations, drastically reduced the initial economic superiority of the Republic. The accord precluded the sale of arms to either of the two sides, but in fact penalized the Republic, as Franco's army was from the very beginning of the war well supplied by its ideological allies, Germany and Italy, which blatantly disregarded the accord. Although the Soviet Union also ignored the arms embargo, the military equipment sent by Stalin to the Republic never matched the quantity or quality of the war material sent by Hitler and Mussolini⁸. Another difference was that the Soviet dictator requested payment in cash (gold), while Nazi and fascist leaders extended unlimited amounts of credit to Franco until the end of the war.

Finally, we must mention the course of the war itself. In a few weeks, the military rebels were able to almost entirely capture the west side of the country (bordering Portugal) and cut off the North coast from the main Republican zone around Madrid and the Mediterranean coast. In June 1937, when the rebel army occupied the most developed Northern provinces, with the largest coal deposits, the iron and steel industries, the shipyards and the merchant fleet, the economic balance shifted in their favor. Moreover, the constant expansion of the territory under the control of the nationalist army put most of the arable land of the country in their hands, which allowed them to feed the population and avoid the shortages suffered by the inhabitants of Republican cities.

⁸ Howson (1998), Moradiellos (2001), and Viñas (2008).

2. Financing the War: How the War was Paid for

There are four ways of paying for a war: taxation, public borrowing on the domestic market, borrowing from foreign markets and money creation⁹. War financing methods have varied greatly, depending on internal and external constraints, institutional factors and on the length and intensity of the conflict. Evidence shows that governments have financed wars by using a mixture of direct contemporaneous taxes, debt and money creation. Adam Smith argued that taxes were the best method of financing because they conveyed the real cost of wars to the general public. A.C. Pigou added debt, although he considered this policy as equivalent to taxation. John Maynard Keynes suggested that money creation would be acceptable until the point of full employment was reached. Moreover, Keynes argued against the use of debt financing and wrote in favor of the use of rationing and price controls. At any rate, available evidence shows that all wars have resulted in significant inflation, as all armies have always resorted to money creation¹⁰.

Internal financing

Taxes were not a significant source of income for either of the two combatant parties. Neither of the contenders introduced major changes in the tax system. Most of the measures merely raised some tax rates or duties and only in the last month of the conflict was a tax on excess profits introduced¹¹.

We have no aggregate data for taxes in the Republican zone. We know, however, that the Republican fiscal administration collapsed in the first months of the war and it took almost a year to rebuild it. The revolutionary organizations suppressed what they considered “capitalist taxes”, blocking the collection of land rents; and the confiscation of private property and of many industrial companies and service firms interrupted the payment of corporate and other taxes, as Comín and Lopez (2008) have pointed out. An official report released by the bureau of the Prime Minister, Juan Negrín, on February 8, 1938, indicated that in the first months of the war total revenues

⁹ These methods exhaust the means by which governments may finance wars. However, they do not exhaust the means by which governments can acquire resources. It does not represent either the total cost of the war, which should include at least both the losses of human capital and physical destruction.

¹⁰ On the financing of the World Wars, see Broadberry and Harrison (2005), and Harrison (1998). For a good summary of the American Civil War, see Ramson (2001). Gómez-Galvarriato and Mussachio (2000) and Cárdenas and Manns (1992) wrote about the Mexican Civil War and Gatrell (1994) about Russia.

¹¹ An extensive review of tax legislation on the Francoist side is available in Martorell and Comín (2008). Pons (2006) provides information on taxation on the Republican side.

from taxes dropped abruptly, although later there was a slight recovery¹². Income from all taxes during the second semester of 1936 amount to around 420 million pesetas, well short of the 2,000 million pesetas collected in 1935 over the same period. Tax revenues increased to 550 millions pesetas in the second semester of 1937, a figure that suggests some improvement in the Republican fiscal administration. This fragmented information indicates that the government was able to collect 1,200 million pesetas at the most during a fiscal year, considerably less than the 4,140 million pesetas in the 1935 budget.

The figures available for Catalonia and Valencia tell a similar story. In Catalonia revenue from taxation fell dramatically from 45 million pesetas in 1935 to 9.4 million in 1937¹³. The data for Valencia, displayed in table 1, also confirm the reduction in tax revenues, from 50.9 million pesetas in 1936 to 8.4 million in 1937 and to a low of 3.7 million pesetas in 1938.

Table 1. Tax revenues in Valencia (in thousands of pesetas)

	1936	1937	1938	1939
Property tax				
January	28	-	-	
June	2,278	739	765	
December	843	1,719		3,160
Tax on profits and rental income				
January	44,377	828	919	
June	1,803	2,228	2,040	
December	1,533	2,853		982
Total Revenues	50,862	8,367	3,724	4,142

Source: Archivo del Antic Regne de Valencia, Intervención de Hacienda, Legajos 5781-5782.

The official figures for zone under Franco's control are shown in table 2. They display a rising trend as the rebel army occupied the largest areas of the peninsula. Revenue from taxes was nonetheless relatively modest. In fact, in the last year of the war, when the Francoists already controlled two thirds of the territory, tax revenues only represented 38 % of the amount collected in 1935.

¹² Juan Negrín (1938): "Al Servicio del Pueblo. Un hombre contra el caso. La Hacienda y la Economía de la república en plena guerra", Barcelona, 8 febrero 1938. Archivo Juan Negrín, Legajo 136.

¹³ Generalitat de Catalunya (1937), vol. I

Table 2. Tax revenues in Francoist Spain

	Millions of pesetas
2 nd half 1936	396
1 st half 1937	552
2 nd half 1937	680
1 st half 1938	791
2 nd half 1938	847
1 st quarter 1939	418
TOTAL	3,684

Source: Ministerio de Hacienda (1940)

Neither of the two sides resorted to issuing debt, although the Republicans made an attempt to in the last year of war, without success. This decision to forego the use of internal debt as a method of financing is surprising, as both sides were in great need of resources. The decision, however, can be understood if we take into account that the authorities in both zones temporarily suspended the payments on the outstanding debt, making investor interest in new issues unlikely.

Instead, both contenders made extensive use of confiscation and expropriation of goods and properties of families and firms considered to sympathize with the enemy. There is little evidence of the amount of funds obtained in this manner. In the case of the Republicans, in the first months of the war confiscations were made through illegal (or at least alegal) procedures. As a result, there are no figures accounting for the amounts collected. From December 1936, the General Directorate of Security (Dirección General de Seguridad) through the Caja de Reparaciones (War Reparations Fund) became the organism responsible for all sorts of confiscations¹⁴. However, most of these funds were put aside with the aim of financing the reconstruction of the country after the war and were eventually used to finance the activities of the Republican government in exile.

The confiscation of assets in retaliation for political opposition was a significant source of revenue for the Francoist administration, even long after the war had finished. Expropriations were not confined to those that were suspected of being political opponents. For instance, general Queipo de Llano, commander of the Francoist troops

¹⁴ Sánchez Recio (1991)

in Western Andalusia, decreed the confiscation of all property and assets he deemed useful to sustain the war effort, from motor vehicles and buildings to mining production. British firm Riotinto was one of the first to suffer this type of requisitions, as nearly 60% of all pyrite extracted during the war was confiscated and sent to Germany in compensation for the aid received from the Nazi regime. This was by no means the only case. The production from the Rif and Setolazar mines was also used to compensate German aid. While there is no estimation of total confiscations on the Franco side, scattered evidence suggests that they were substantial. For example, the magnitude of the requisitions undertaken by the Francoist authorities in Andalusia led one of Queipo de Llano's associates, Antonio Bahamonde, to state that property rights were more secure under the Government of the Popular Front than in Francoist zones¹⁵.

The Francoists also asked for voluntary contributions, although it is difficult to know whether these contributions were truly voluntary, as the military authorities used various forms of coercion to force donations.¹⁶ The drive for funds was initiated by the so-called National Subscription established in August 1936, asking the population to donate jewellery and gold. The quantitative relevance of these contributions remains unknown, although Viñas (1976) has estimated that they may have amounted to 668 gold ingots weighing a total of 3.5 tons, and to 162 silver ingots¹⁷.

The main source of internal financing of both sides was money creation. By means of advances and credits from the Bank of Spain the Republic raised more than 24,000 million pesetas. According to the provisional budgets mentioned below, the total expenditures of the Republican government during the war amounted to 40,000 million pesetas. We can therefore deduce that the issue of new money represented 60% of the Republicans' total revenue, as shown in table 3. As regards the Francoist Treasury, the deficit during the war, that is, expenses over the tax revenues amounted to 8,260 million pesetas, according to Larraz. Out of this figure, 7,200 million were covered by loans and advances from the nationalist Bank of Spain, and the rest (1,060 million) by debit balances in different accounts of the Bank. All in all, new money accounted for almost 70 percent of the acknowledged internal expenses of the civil and military administration of the nationalist State during the war, as can also be seen in table 3. If all these figures are correct, and we believe they are, it means that the financial strategy

¹⁵ See Bahamonde y Sánchez de Castro (2005)

¹⁶ See Martorell and Comín (2008)

of both combatants was quite similar. As a result, it cannot be argued that Francoist policy was more orthodox than that of the Republicans¹⁸.

Table 3. Bank of Spain Loans and Advances 1936-1939 (millions of pesetas)

	Republican zone	Francoist zone
Credit lines	24,000	7,200
Debit balances		1,060
Total	24,000	8,260
Percentages of total expenditures (%)	60	69

Note: the figures for total expenditures used to compute the percentages in the last row are shown in table 7

Source: Ministerio de Hacienda (1940) and Pons (2006)

External financing

Foreign resources to pay for the war were especially relevant because Spain did not have the capacity to produce military goods. Hence, imports were essential to maintain the war effort. Franco was able to purchase his military equipment with German and Italian "aid" and with loans from private banks in Portugal, Switzerland and the United Kingdom. The most important source, because of its magnitude and strategic significance, was the so-called aid received from the Axis powers, which included troops, military experts and military supplies on credit. The terms under which this financial assistance was provided varied over time and from country to country. The mechanism, timing and control of the funds were always in the hands of the nations providing the aid. Nonetheless, in all cases it was agreed that the advances and credits were to be settled at the end of the conflict. In fact, the total amount to be paid by Spanish authorities was established in bilateral diplomatic negotiations once the war was over. As shown in table 4, the Franco civil and military administration borrowed as much as 760 million dollars.

¹⁷ However as the gold from the National Subscriptions was sold to a New York bank after the war, it cannot be included as an asset used to finance the conflict.

Table 4. Foreign loans (Francoist)

		Million	Dollars (million)
Axis powers aid	Italy	8,300 lire	447
	Germany	732.6 RM	295.4
Loans from Portuguese financial institutions			6.76
Loans from other sources			10.97
TOTAL			760.12

Sources: Martínez Ruiz (2006a). In the case of Germany, all the aid provided and not only the outstanding debt has been considered. See Martín-Aceña, Martínez Ruiz and Pons (2010)

In contrast, the Republic did not receive any significant foreign financial assistance, except a minor Soviet credit in 1938 (around 70 million dollars). The Republican government did not float debt in London, Paris or New York, in spite of having a large amount of gold to be used as guarantee. The reasons for this decision are controversial: either they were not able to do so because of the political aversion of international banks and financiers, or it was a deliberate policy decision.

Although the Republican government did not resort to external borrowing, it was not short of international means of payment, as they controlled most of the gold and silver reserves of the Bank of Spain. At the outbreak of the civil war, the metallic reserves in the Bank of Spain that could be mobilised to finance the war amounted to about 635 tones of fine gold, equivalent to 715 million dollars. These reserves were ranked fourth in the world, behind the reserves held by the Federal Reserve System, the Bank of France and the Bank of England (and excluding the Soviet Gosbank reserves). This huge amount of gold had been accumulated during the First World War, thanks to the special conditions created through Spain remaining neutral. For four years in a row the balance of payments in the current account ended with a surplus, which in turn led to an inflow of foreign exchange that was invested in gold coins and ingots. By the end of the war, the Republican government had used up these reserves completely to purchase military equipment, ammunition, food and raw materials abroad¹⁹.

The sale of the gold reserves was carried out in two stages. First, the Bank of France acquired 174 tones of fine gold, for which the Republican government obtained

¹⁸ Orthodoxy has been defended, among others, by Velarde (1999)

¹⁹ For more information about the sale and final use of the gold reserves, see Viñas (1976) and also Martín-Aceña (2001 and 2008)

3,922 million francs (around 196 million dollars). In the second stage, all the remaining gold, 510 tones (equivalent to 460 tones of fine gold valued at 520 million dollars) was sent to the USSR and deposited in Moscow in the vaults of the Gossbank, the Soviet central bank. In 1937 and 1938, the Gossbank bought 426 tons of fine gold from the Republican government, which in exchange obtained 245 million dollars, 42 million pounds and 375 million francs. Of these sums, the Soviet government retained 132 million dollars as payment for supplies, and the rest was transferred to Paris to different accounts in the Banque Commerciale por L'Europe du Nord (a Soviet financial institution in Paris). The Republic used these accounts to pay for all types of war supplies, such as aircrafts, tanks, artillery, rifles, and ammunition. The money was also used to buy foodstuffs and raw materials. The purchases were made in Brussels, Prague, Warsaw, New York and other parts of the world. Moreover, when most of the gold had gone, the silver holdings of the Bank (1,225 tons) were put up for sale. At this time, the main buyers were the United States Treasury and the Bank of France. In exchange, the Republican government received around 15 million dollars. There were also some silver sales to private French and Belgian firms that yielded an additional 5 million dollars. Table 5 summarizes the sales and the income obtained from them.

Table 5. Sales of Bank of Spain

		Alloy gold (tons)	Fine gold (tons)	Dollars (millions)
Gold	1936	194	174	195.8
	1937	415	374	394.6
	1938		67.5	75
	Total		615.6	665.4
Silver	1938			20
TOTAL				685.4

Sources: Sardá (1970), Viñas (1976)

To send and deposit the Bank of Spain's gold in Moscow was an extravagant decision that sparked a heated debate among contemporary politicians, a debate that has continued until our days. When the war broke out, the reserves were kept in the subterranean vaults of the Bank in Madrid. But in September, when the government feared the capital city might fall to the rebel army, the minister of Finance ordered the

transfer of the gold and silver deposit to a naval store in the city of Cartagena on the Mediterranean coast. From there, the remaining gold, the initial deposit less the amount that had already been sold to the Bank of France, was loaded onto four Soviet vessels and shipped to Odessa and later to Moscow in a special train convoy. One widely accepted explanation sustains that as the Soviet Union was the only country prepared to help the Spanish Republic, the Gossbank was the most suitable place to deposit the gold. However, Martin-Aceña (2001, 2008) has argued that the Republican ministry of Finance had other options (such as London, Paris, Zurich or New York), which were not considered. While this is true, the non-intervention agreement promoted by France and Great Britain and the reluctance of the democratic powers to support the Republican government may have influenced the minister's final decision. He might have believed that the authorities that had signed the agreement would have taken steps to block the gold reserves once transferred to their territory. And yet, at the same time, the gold was being sold in Paris with no difficulty whatsoever. Another plausible explanation is that Stalin and the Soviet agents in Madrid pressed, or forced, the Spanish minister of Finance to ship the gold to Moscow to guarantee payment of the military supplies that were already arriving at the ports of Barcelona and Valencia.

Moving on, the figures in table 6 show that both parties also spent the same amount of foreign funds, although the lenders and the origin of the money were different. The Republican government obtained 769 million dollars from their dealings with the Soviets, a similar figure to the 760 million dollars that Franco received from his political allies, Germany and Italy.

Table 6. Total Foreign Means of Payment (millions of dollars)

	Francoist administration	Republican government
Allies credits (aid)	749.16	70
Assets sales		
Gold		665.4
Silver		20
Others	10.97	14
TOTAL	760.13	769.4

Source: see text

3. War Expenditures: Which Side Spent the Most Financial Resources?

At the outbreak of the war, the prevailing budget was that of 1932, which was continuously extended in subsequent years. The official budget, however, did not include all the expenditure on behalf of the Republican government during the war, as was recently explained by Pons (2006). In February 1939, the Ministry of Finance produced an internal document summarizing budgetary expenses for 1936, 1937 and 1938²⁰. This summary, which was never published, distinguished among ordinary, extraordinary and undisclosed credits. Only the first two were included in the budget published in the Official Gazette. When the figures of the undisclosed credits are taken into consideration, the picture that emerges is completely different to that portrayed by the official figures in the Gazette. According to this new evidence, Republican expenditure during the war multiplied five-fold, from 5,752 million pesetas in 1936 to 21,335 million pesetas in 1938. As can be seen in table 7, the amount spent by the Republicans totalled 40,335 million pesetas. More than half of this figure was spent on military goods and services. That is, in 1937, the Ministry of War received 54 % of the total budget expenses and this percentage rose to 67 % in 1938.

On the other hand, and according to the data compiled by Larraz in 1940, the budgetary expenses of the Francoist administration only rose by 11,894 million pesetas, less than a third of that recorded in the Republican budget. Therefore, if these figures are accurate, the figures in table 7 would seem to validate Larraz's claim that Franco won the war despite the considerable difference in the volume of expenditure on behalf of the two sides.

²⁰ Pons (2006) provides the figures of this internal document.

Table 7. Total Expenditure (Millions of pesetas)

		Francoist administration	Republican government
1936	Dec.	819	5,752
1937	June	1,291	
	Dec.	2,252	13,217
1938	June	2,602	
	Dec.	3,208	21,335
1939	March	1,722	
Total		11,894	40,304

Sources: Larraz (1940) and Pons (2006).

However, the official accounts prepared by the Ministry of Finance after the war do not reflect the real budgetary position of the Francoist administration entirely, because a large volume of military supplies were not paid during the three years of the conflict. Larraz estimated that the total amount of deferrals represented about 800 million pesetas (500 million corresponding to supplies and construction work and 300 million to military transport). But even this figure still underestimates the unpaid war bills of the Franco administration. In fact, in the official government budgets for the years 1940 to 1946, an additional amount of 8,060 million pesetas was included to cover debts and expenditure made during the war, the payment of which had been postponed. 22% of this figure went towards the interest and principal of the public debt and more than 50% for military supplies to the Army. The rest were other deferred payments of war-related expenditure made by the Air Force, the Navy and the Ministry of Internal Affairs²¹.

Moreover the Francoists also took drastic measures to reduce all expenditure not directly linked to the war effort. For instance, civil servants' salaries were cut and they were forced to contribute to the war effort with one or days of their monthly salary. The Francoist military administration also had a minimal institutional structure, not having to finance institutions such as the Parliament or the Constitutional Guarantees Court²². Republican war prisoners contributed to the reduction in expenditure as well. A decree of May 1937 established that prisoners could be put to work, mostly in the construction sector, without pay, a measure that might have had a significant saving impact.

²¹ Data in Comín and Diaz Fuentes (2005)

Although unknown, the total expenditure of Franco's army and administration during the war exceeded the figure calculated by Larraz in his report. If we add both the 11.9 million pesetas in table 7 and the 8.1 million pesetas of the officially recognized deferred payments, then the amount spent by the Francoist side rises to 20 million, which still falls short of the amount spent by the Republicans, although the gap is substantially smaller.

On the other hand, it must be taken into account that prices behaved differently in the two zones. The inflation rate was consistently higher in the Republican territory than in area under Franco's control. Unfortunately, we only have wholesale prices for the entire period of war for the Francoist side, while official prices on the Republican side are only available for the first year of the war.. Table 8 includes the information available for the two zones for the first twelve months of the war. It can be observed that prices rose rapidly in Republican Spain. They doubled between July 1936 and March 1937, while on the contrary, in the rebel zone, prices seem to have remained quite stable, recording a moderate increase of only 15%.

Table 8. Wholesale Prices (July 1936=100)

		Republican zone		Francoist zone
		National	Barcelona	National
1936	July	100.0	100.0	100.0
	August	102.0	102.4	101.5
	September	109.7	104.8	102.1
	October	117.2	111.2	105.1
	November	129.4	116.1	106.1
	December	149.0	120.0	107.2
1937	January	166.2	128.1	111.2
	February	179.9	139.9	112.2
	March	202.2	152.5	113.1
	April	234.6	168.5	112.5
	May		170.3	114.0
	June		173.8	113.8
	July		180.8	114.2

Sources: Miguel (1944). For Barcelona, Maluquer de Motes i Bernet (2008)

Official prices were also published on a monthly basis for Spain's nationalist territory. This information was later used by Miguel (1944) to produce a price index for

²² See Martorell and Comín (2008)

the entire war period, which has been included in table 9. The index shows relative price stability in the Francoist zone until the end of the war.

Table 9. Official Wholesale Price Index for the Francoist Zone (1936-1939)

1936	July	100	1938	March	125
	Sept	102		June	127
	Dec	107		Sept	130
1937	March	113		Dec	137
	June	114	1939	March	141
	Sept	116			
	Dec	121			

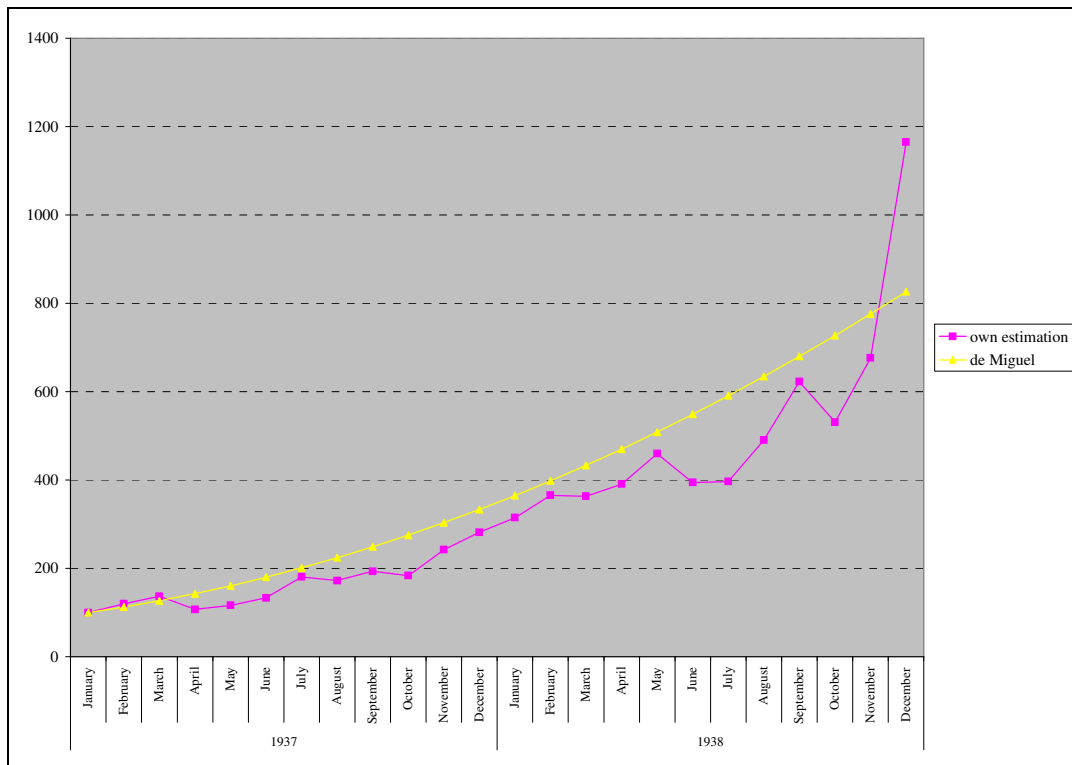
Sources: Miguel (1944)

In contrast, we do not have official prices for the Republican zone after August 1937. To offset this lack of information we have used two different series. One is an estimation made by Miguel in 1944. According to this author, after July 1937 prices rose exponentially, unleashing uncontrollable hyperinflation and a simultaneous flight from currency (a typical phenomenon for the currency of the losing side in a military conflict).

In order to test the plausibility of Miguel's series and to improve our information, we have attempted to construct a new estimate using the French franc exchange rate of the peseta and the French wholesale price index²³. According to the absolute version of the standard purchasing power theory, the exchange rate should reflect the inflation differential. Taking into account this theoretical identity, we have conducted a purchasing power parity exercise to obtain a price index and compare it to the estimate published by Miguel. The two series are presented in figure 1. It can be seen that the new index replicates that of Miguel until mid-1938, although our estimation is below his index. In the summer of 1938, our index shows that Republican prices seem to have reached a plateau that coincided with the decisive Ebro battle in which the Republicans obtained a temporary victory over the Franco army. Afterwards, the rapid advance of the rebel army towards the Mediterranean coast led to a flight from the Republican peseta and to an upturn in the inflation rate.

²³ Wholesale prices for France (1937-1939) in <http://www.nber.org/databases/macroeconomy/contents/chapter04.html>

Figure 1. Wholesale Prices in the Republican Zone (January 1937=100)

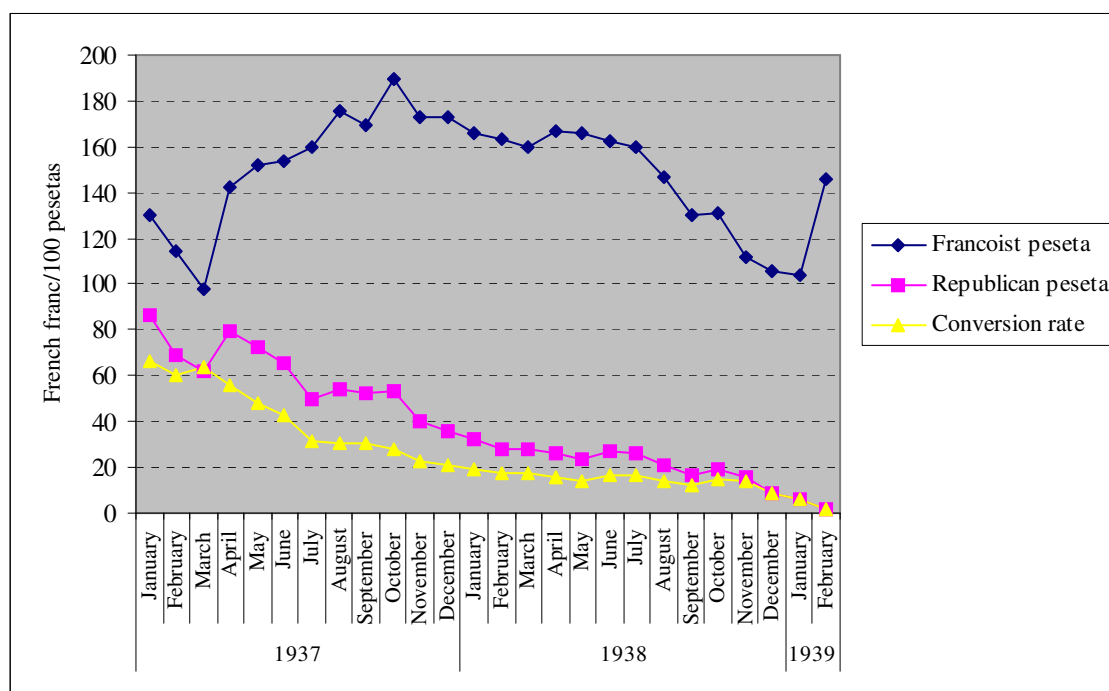


Sources: Miguel (1944), and our estimates

The evolution of the exchange rate of the nationalist peseta, shown in figure 2, also provides an alternative indicator for the behaviour of the prices in the zone controlled by the rebels. The evidence suggests that the Franco peseta did indeed lose more value than official price figures suggest, dropping by 33% against the French franc between July and December 1938 and by 51% against the dollar. Such a fall in the external value of the Francoist peseta was not reflected in the official price index, which only registered a 10% decrease in the same period²⁴. Moreover, the data suggest that the stability of the Francoist peseta only lasted until the end of 1937.

²⁴ Once again it seems that either the system of price controls and rationing established by the Francoists was very effective, or the price statistics recorded by the Francoist authorities failed to capture the movements in black markets. The information on prices on black markets during the war is scarce but it is worth mentioning can be pointed out that the price of bread in 1943 was 800% higher than the official price.

Figure 2. Exchange Rates of the Two Pesetas in Paris



Source: Miguel (1944)

Table 10 below compares the overall expenditure of both sides using the official price index to deflate the Francoist figures and our new estimated price index to deflate the Republican figures. The expenditure picture that emerges in the two territories is quite different from that shown in table 7. When nominal figures are transformed into real values, the expenditure of both sides seems to have been quite similar: 9.4 and 8.0 billion pesetas.

Table 10. Total Expenditure (millions of pesetas 1936)

	Francoist administration	Republican government
1936 Dec.	765	3,940
1937 June	1,133	
Dec.	1,861	2,421
1938 June	2,049	
Dec.	2,342	1,576
1939 March	1,221	
Total	9,371	7,937

The caveats made above and the data presented in table 10 challenge the commonly accepted idea that the Republican government spent substantially more than the administration of Franco's rebel army. Although the assertion is true when the comparison is made in nominal terms, the figures in real terms tell quite a different story. They suggest that their actual purchasing power was relatively similar or even favourable to the Francoists if all the deferred payments are included.

4. Why did the Republicans Suffer Higher Inflation?

We already know the financial resources consumed by both the Republican government and the Franco administration. As proven in one of the previous sections, the two sides relied almost entirely on money creation to pay for their domestic current expenditure. The increase in the amount of money far greater than the growth in production of new goods and services led to strong inflationary pressures that were particularly pronounced in the territory under Republican rule. In fact, one could argue that the more rapid and sustained rise in prices in the Republican zone was one of the key factors that tipped the balance of resources towards the Francoists. The question is, then, why did the Republicans suffer higher inflation? Is the higher inflation rate definite proof of gross economic mismanagement on behalf of the Republican government?

The more intensive use of the Bank of Spain by the Republican Treasury has been considered the key element behind the difference in inflation rates. But the evidence presented above suggests that both sides resorted to the central banks. Furthermore, the percentage increase in the quantity of money was quite similar, as is apparent in table 11. In the Republican zone, money supply increased rapidly and, by March 1939, the public had about four times the amount of money in their hands than at the beginning of the war (a quarterly growth rate of 14%). The stock of money in the Francoist zone grew at a slower rate at first, but as Franco's Army extended the territory under its control, the money in circulation multiplied by nearly 6.5 (a quarterly growth rate of 18%).

However, when comparing the change in the stock of money in both zones, it is also necessary to consider the size of the economy. As there are no figures available for the production as a whole, we take the population as an acceptable proxy. The figures for money per capita are also shown in table 12. As population dwindled in the Republican territory, the quantity of money per capita rose six-fold (a quarterly growth

rate of 18%)²⁵. On the contrary, as the population in the Francoist zone grew, the per capita quantity of money only increased four-fold (a quarterly growth rate of 14%). As a result, the money supply grew at a faster rate in the Republican zone in per capita terms.

Table 11. Monetary Supply (pesetas)

	Money supply* (million)		Money per capita	
	Francoist zone	Republican zone	Francoist zone	Republican zone
1936 (July)	2,299	6,595	230	441
1936 (December)	2,378	9,083	193	720
1937 (June)	3,440	12,194		
1937 (December)	5,166	17,053	355	1,601
1938 (June)	6,971	20,929		
1938 (December)	9,239	26,613	592	2,620
1939 (March)**	14,873	28,027	952	2,758

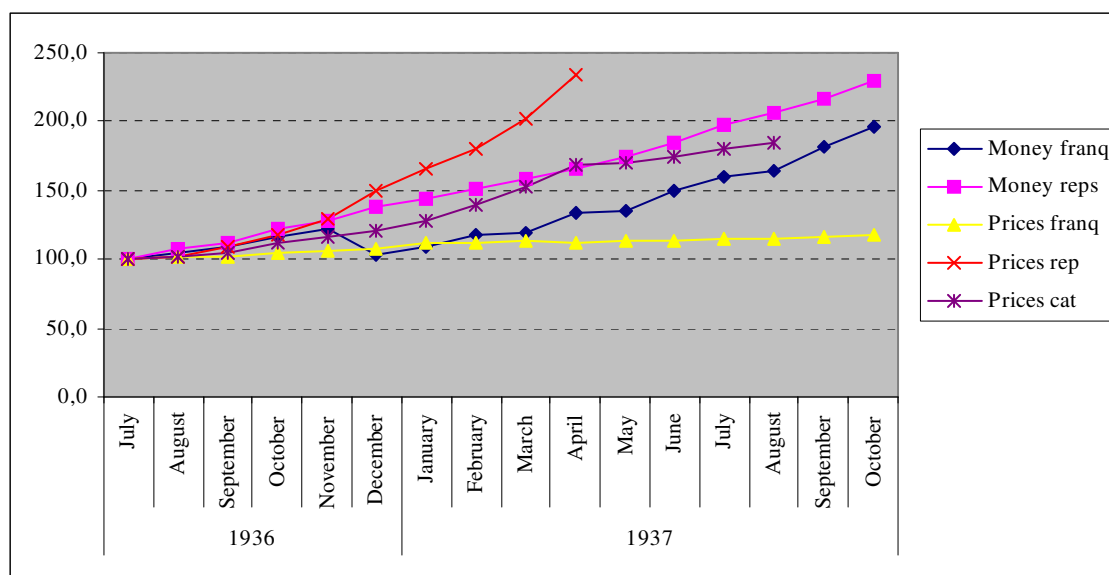
* Includes currency and short term deposits ** Population as of 31.12.1938.

Sources: Money supply in Miguel (1944), population at the end of each year in Ortega and Silvestre (2006), population in July 1936 in Martín-Aceña (2004)

Although the decline in population and the resulting excess liquidity contributed to inflation in the Republican zone, figure 3 provides evidence that other significant factors were at work. The figure shows that the price lines did not shadow population losses. For instance, until December 1936 when the population fell by 2.3 million in the Republican zone, prices rose in line with the money supply. In contrast, from December 1936, when the population decreased by a much lesser extent, prices increased significantly more rapidly than the quantity of money.

²⁵ Population figures come from new estimates by Ortega and Silvestre (2006)

Figure 3. Money and prices (July 1936=100)



Sources: Miguel (1944). For the price index for Catalonia, Maluquer de Motes (2008)

One factor that might explain why prices rose more than the stock of money is a downturn in production not related to the fall in population. Although recent studies have suggested that agrarian and industrial production did not collapse in the area controlled by the Republican government, as is frequently asserted, the truth is that there were marked energy and raw material shortages as well as a widespread scarcity of food and consumer goods in the Republican zone²⁶. This was a consequence of the unbalanced distribution of population and agrarian supplies between the Republican and Francoist zones. While the largest part of the population was in the Republican area, the agrarian producing area, particularly that of grain, potatoes, meat and fish, was under the control of Franco's army. Moreover, Republican Spain was divided into two separate geographical areas, which restricted the transportation and distribution of raw materials, food and industrial goods. As a result, we must conclude that a greater imbalance between cash in circulation and total output did contribute to the escalation of wholesale prices in the Republican zone. Moreover, the fact that prices rose by more than the stock of money and more than the decline in output justifies, means that velocity rose as well. Velocity might have risen because inflation itself discouraged the public from holding cash, adding to the pressure on prices.

Political factors may also explain the faster increase in Republican prices. The regional authorities and revolutionary organizations printed their own money as a way

²⁶ Catalan (2006) and Martínez Ruiz (2006b)

of asserting their political independence. Consequently, there was a boom in banknotes and coins in the Republican zone²⁷. The fact that numerous issuing centres were operating (the central government, the autonomous governments and many other regional and local institutions) and the variety of currencies in circulation undermined the credibility of the Republican peseta. The Republican government failed to see this problem and did not put a stop to the anarchical situation until autumn 1937. The continuous military setbacks suffered by the Republican Army was another factor that fuelled inflation, as people lost faith in the currency and fled from it.

The currency war declared by the Francoist against the Republican peseta should also be taken into consideration²⁸. Rebel authorities declared all banknotes issued after July 1936 by the Republican Bank of Spain illegal, while at the same time approving the issue of new banknotes to be put in circulation by the newly created nationalist Bank of Spain. This decision generated anxiety and uncertainty among the population, particularly in the zones close to the front lines. When they anticipated that Franco's troops would launch a final attack to overrun the territory, they disposed of their Republican pesetas, which were worthless if the village was occupied, buying as much scarce tangible goods as they could. After the occupation of the industrial North, in the summer of 1937, Francoists took further action that put additional pressure on the Republican economy. An act was passed blocking all current accounts and bank deposits opened or increased after the outbreak of the war. Again, when news of the advance of the Franco army reached the population in Republican cities, holders of deposits reacted by transforming them into cash and then into goods and services. Prices simply rose to clear the market.

²⁷ Martorell (2006)

²⁸ This has been extensively studied by Sanchez Asiain (1999)

5. Conclusion

According to our new estimates, the two contenders consumed approximately the same amount of domestic and foreign resources. Table 12 summarizes the information included in tables 6 and 10. The figures are sufficiently clear and do not need more than a few final comments. Both sides spent about 2,000 million dollars, at 1936 prices, a far from negligible amount. Two thirds were obtained from domestic sources, mainly money creation, and spent in the domestic markets. The rest was acquired abroad and the two combatants used that money to pay for all sorts of supplies in foreign markets.

Table 12. Total Resources (millions of dollars 1936)

	Francoist administration	Republican government
External resources	760	769
Domestic resources	1,282	1,086
TOTAL	2,042	1,855

Note: For the exchange rate of the peseta see Svernilson (1954)
Source: table 6 and table 10

The financial decisions made by the two contenders shared a common objective: to win the war. This was the main focus of their financial strategies. Although the militarization of the economy was apparent in the case of the Franco zone, the Republican government also concentrated its energies on the military, which is apparent when examining the increasing proportion of military expenses in the budget. As this last argument has been frequently questioned, it is worth emphasizing. Nevertheless, despite having the same amount of resources, the Republicans obtained less and lower quality military equipment and supplies. Inefficiency or inexperience was not the main cause. The insurmountable obstacles imposed by the non-intervention agreement to buy arms legally in the markets of the producing nations were much more relevant. In contrast, Franco received a constant flow of arms from his ideological allies, Germany and Italy. Besides, the supplies to the nationalists were sent on credit and payment postponed to the end of the war.

What lesson can be learnt from the Spanish civil war concerning the relationship between its final outcome and the volume of resources employed by the two parties in the conflict? Was the result of the Spanish civil war different from what was expected,

given the initial distribution of wealth and resources? We have seen that, although the territory controlled by the Republican government was wealthier than the regions under the rebel army, this initial advantage could not be transformed into a greater capacity to meet the needs of war. In the early weeks of the conflict, the Republican government, taken aback by the revolt of part of the Army and having to face severe internal turmoil, suffered a series of military defeats. As a consequence, the Republican State lost almost half of the territory that was taken over by insurgents. Moreover, the so-called non-intervention accord hindered the acquisition of war material from foreign suppliers. After a year, the question was not whether the revolt would succeed, but how long the Republic would be able to resist. As time went by and Franco's army inflicted further defeats on the increasingly demoralized Republican troops, the market began to anticipate the victory of the nationalist side. The Republic's ongoing internal political disputes and the economic difficulties that plagued the population in Republican territory also contributed to the belief that the winning party was on the other side of the front. The lack of confidence in the political chances of the Republic and dwindling financial and material resources led economic agents to flee from the Republican peseta, which in turn fuelled uncontrolled inflation caused by excessive money issuing. We believe that the Spanish Republic did not lose the war because of a lack of resources. The Republicans lost the war due to the constraints imposed by the non-intervention agreement, due the absence of internal political cohesion and also to early military setbacks, which altogether prevented the Republican government from converting its initial economic and financial superiority into military superiority.

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