An Economic Analysis Of The Fall Of France In June 1940 Based On The Theory Of New Institutional Economics

Dr. Ioannis-Dionysios Salavrakos (*)

Introduction

The fall of France in June 1940 is primarily attributed to military factors. Most historians and political scientists associate the fall of France with the brilliant tactical German advance through the Ardennes forests, a move which took the Allies by surprise. In addition, many associate the defeat of 1940 with poor Allied doctrines, leadership, training and the complete air superiority of the German Air-Force. All these tactical factors should be considered as the tip of the iceberg since a closer and more in depth analysis can attribute the fall of France to a nexus of economic forces. Thus, the intellectual aspiration of the current work is to demonstrate that the 1940 defeat was associated with immense economic disadvantages. The structure of the paper is as follows: In the first section we provide a theoretical framework based on the theory of New Institutional Economics. In the following sections we analyse the economic,
military, and diplomatic developments of the interwar period 1919-1939 and we demonstrate the French actions. The next section applies the theory in the September 1939-June 1940 period, again for the French and allied side. Conclusions follow.

Theoretical Framework: Strategy and New Institutional Economics (NIE) as a tool of state, economic growth and warfare analysis.

Our aim is to describe and analyse the French “grand strategy” or “security strategy” of the 1919-1940 period. The concept of strategy has been analysed by many scholars in international relations. According to the Webster dictionary, strategy is the science and the art of using the political, economic, psychological and military power of a country in order to achieve the policies of the state in peace and in war. For Clausewitz, strategy is the art of using battles as means in order to achieve the objectives of war. On the other hand, Moltke points out that strategy is the adaptation, the use of resources that a general has at his disposal in such a way which will successfully achieve the objectives which have been set by the government. Finally for Liddel Hart strategy is the art of distribution and use of military means in such a way which will allow the achievement of political objectives. It is obvious that there is no intellectual consensus about the concept of strategy. Some scholars use a broad concept and others have a narrow military perspective. However, when we refer to the concept of “strategy” we have to make a clear distinction between the “aims” that we try to achieve and the “means” that we have in order disposal in order to achieve our objectives.1

There are different approaches towards strategy. We can identify the major ones as follows: “balance of power strategy,” “appeasement strategy,” “rapprochement,” “institution-building.” The following definitions are useful for the theoretical background of the argument:

1. **Balance of power strategy.** This has many interpretations. However we can distinguish between attempts by a state to increase its own power against an adversary (internal balancing) and attempts to weaken the adversary by alliances

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or by decreasing the strengths of the adversary by luring away its allies. We shall demonstrate that France attempted to follow both internal and external balancing.

2. **Appeasement strategy** has been distinguished between the “tactical” and the “strategic.” In the first case, that of “tactical appeasement”, the aim is to gain time in order to increase your internal strength (military, economic etc.) through limited concessions on issues of trivial importance without jeopardising the main, vital interests of the state. In the second case, that of the “strategic appeasement,” the aim is the complete normalisation of the bilateral relations through concessions. The main advantage of the appeasement strategy is that it can produce positive results when the rival state has limited objectives. If that is the case then the bilateral relations will improve after the concessions of the first state, in the long run they will normalise and the stability will be preserved. The main disadvantage of appeasement will occur when the rival state does not have limited objectives. If that is the case the concessions of country A will be interpreted from country B as a sign of weakness. Then country B will ask for new, and this time greater concessions etc. This vicious cycle of demands-concessions will sooner or later lead to an armed conflict. Typical example of this unsuccessful appeasement strategy has been the Munich agreement of 1938, which at the end did not avert the Second World War.

3. **Rapprochement** has been defined as the limited but essential improvement of the bilateral relations between two states when both sides realise that they have common interests on some issues. In this framework, both countries realise that they have common economic interests and common interests in regional energy networks (oil and gas pipelines), transportation networks, telecommunications etc.

4. **Institution building** or institutionalism is the stream of thought which gives emphasis on collective decision making, the rule of international law and collective security achieved through international organisations/institutions. The

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origins of this school can be traced in the tragic experience of the First World War (1914-1918). With the creation of the League of Nations this approach emphasises that bilateral disputes can be resolved peacefully through international institutions. However the failure of the League in the 1930s on issues like Spain’s civil war, Italian attack on Abyssinia, Japanese attack on Manchuria and later the outbreak of the Second World War (1939-1945) are adequate proof, according to the critiques of this approach for its inefficiency.3

The theory of New Institutional Economics (NIE has been used extensively as a tool which analyses the rise and fall of Great Powers across history.4 The theory emphasises that economic growth and prosperity can be achieved when a state has four elements:

1. An efficient state mechanism and a tax authority which collects taxes and uses them efficiently. This efficient state mechanism provides a safe umbrella for private investments to flourish and thus accelerates growth.

2. Low Debt which allows the state to have low interest rates and uses most of its revenues for state investments in health, education, infrastructure and not on debt repayments.

3. A central bank which keeps inflation under control and has a mechanism, which monitors the banking sector, and provide guarantees for savers and investors.

4. Efficient institutions which minimise via legislation the various conflicting social interests thus establish a social stability and cohesion which allows the economy to flourish and generate growth.

It goes without saying that the process is slow and invisible. The best way to depict the above theory is via the Square of Power model which has the four elements as follows:

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Figure 1: The Square of Power Model

Parliament   (Bureaucracy-Tax authorities)

National Debt-money                                                                 Central Bank


The above framework is not only applied in years of peace and stability, but it can be used to analyse success or failure in war. To illustrate:

**Bureaucracy-Tax Authorities:**

Any war can theoretically be financed exclusively by taxation. However, if this is the case, heavy taxation will create social unrest and eventually, the government will be forced to seek a diplomatic solution. It goes without saying that this is true in the case of a prolonged war of attrition. If the war is won or lost in a single battle or a quick campaign the above assertion does not hold. However, most wars are prolonged conflicts. The second issue associated with taxation is the efficiency of the tax authorities per se. If taxes are not collected fully during the era of peace they shall be collected during war times?

**National Debt/ Money Markets:**

The second way to finance a war, when this erupts, is via internal or external loans. If the option of internal loans is exercised this requires adequate level of savings from the era of peace. If the citizens do not save during peace or they are in debt how can they finance a war? If this is the case, [internal] financing is impossible and the government has to offer any war-bonds which issues to international markets and investors. In this case, the optimum strategy is that the loans have a long-time duration
with low interest rates. The opposite option (i.e, short-time duration and high interest) is not desirable. However the international investors will buy the bonds in time of uncertainty only if the state entered the war with low public debt. The level of loan (small or high) is dependent on the financial needs and on the ability to attract financing from other sources (like taxation or increased money supply). The loan per se does not guarantee a quick victory.

Money Supply-Central Banks:

The third way to finance a war is the excess print of money by the central bank (i.e. excess money supply). Historically, under gold standard regime, the money which existed inside an economy was equal to the amount of gold reserves in the central bank. If the money in circulation was in excess (above the level of gold reserves) then the increased money supply triggered hyperinflation thus triggered social unrest. Nowadays, money supply generally reflects the value of goods and services which the economy produces. If this increases then hyper-inflation can be triggered.

Institutions and Parliament:

The fourth invisible force which will determine victory or defeat in war is associated with institutions. There are two dimensions here. The first is the quality of civil-military relations. Who decides in war? The answer to this question by the German General Staff has been that the commander in chief at the tactical theatre of operations has the freedom to take all the necessary decisions in order to achieve victory. Opposite to this rationale is the well known phrase that: “War is a too serious matter to entrust it to military men,” by Clemenceau. The institutional conflict is obvious. However there is a second dimension about institutions and how they affect war. In a democracy various political parties will win elections and rule for a certain period of time.

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5 Georges Clemenceau (1841-1929) was French Prime Minister from November 1917 to January 1920. When he took office the war was in a critical phase since the Russians had collapsed in the East and the Italians had suffered the defeat of Caporetto. In addition, few months earlier the French Army had faced mutinies. Thus the overall military situation was critical for the Entente powers. It is believed that the famous phrase was made at that time.
Obviously, all political parties have voters (supporters) which belong to certain social classes and social classes have conflicting interests. The crucial question according to the NIE paradigm is if the parliamentary majority will legislate in order to support exclusively the interests of its own voters or if the legislation will try to compromise conflicting social interests. In the first case, when the interests only of the voters of the specific party which won the election are satisfied, class struggle will increase since the interests of other social classes are marginalised. In this case social instability (violence, strikes, demonstrations etc.) will certainly decrease the growth rate of the economy and will also have a harmful effect on the morale of the population in case of war. If the opposite occurs (i.e. a social compromise via the legislation) then all social classes will be satisfied. This will create a stable social environment which will promote economic growth and the morale for sacrifices will be high in case of war.

France in the Inter-war years 1919-1939: Economic, Social and Political developments

After the end of the Great War in 1918, France was victorious but it had to face immense economic problems. The Northern part of the country was destroyed during the hostilities and huge sums were needed for the reconstruction of the region. On the other hand the French public debt during the war was increased and this required also immense funds for repayment.

The cost of the war to France was as follows: Monetary circulation by the end of 1914 was 10,042 million French Francs (m. FF), by the end of 1915 it was 13,216 m. By the end of 1916 it was 16,580 m., by the end of 1917 22,336 m. and by the end of 1918 30,250 m.FF. Public debt was increased from 32.5 billion FF to 173 billion FF.

According to another source, war damages were estimated to be 113% of 1913 GDP; 60% of those damages were represented by the destruction of productive capital, housing capital, and land. French public debt had reached 170% of GDP in 1919, compared to 66% in 1913. Prices tripled during the war. The French franc depreciated between 1919 and 1920: To illustrate: the exchange rate was 25 francs for one pound.

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sterling in 1913, but there were 42 francs for one pound in December 1919, and 60 francs for one pound in December 1920.\(^8\)

France had the biggest record of strikes during the war among the belligerent Powers with 49,400,000 days lost, when Britain had 26,934,000 and Germany 6,450,000.\(^9\) This demonstrates vividly the social dissatisfaction associated with the war. Finally the human cost for France was immense. According to one source total French human osses (dead, wounded, missing, prisoners) were 3,844,300.\(^10\) According to another source total human losses were more than 5,000,000.\(^11\) Another source provides the figure of 5,670,000.\(^12\) Whatever the exact numbers it is obvious that the economic and the human cost of World War I for France was so high that practically made the victory of 1918 pyrrhic.

After the war and in order to face the double economic challenge of reconstruction and high defence spending France needed the war reparations of Germany. France extracted from Germany the sum of £1,600 m. as reparations but most of these funds were channeled to French debt repayments living just £600 m. available for other economic activities.\(^13\) In addition the French economy suffered serious monetary crises until 1926.\(^14\) The agricultural production had been reduced compared to the pre-war levels and managed to enjoy a minor increase only in the 1930s. Thus with 1913=100 (equalling hundred means that this is the year of statistical basis) the index of agricultural production was 77 for the 1919-1922 period, 90 for the 1923-1926 period, 99 for the 1927-1930 period and 105 for the 1931-1934 period. These numbers mean that with 1913 as basis during the 1919-1930 period agricultural production was lower; whereas during the 1931-1934 period agricultural production was just 5% higher from

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\(^{14}\) Before the war the exchange rate of the gold Franc to the $ was 1$=5FF, in 1919 it was 1$=11FF, and in 1924 it was 1$=40FF. In 1926 the exchange rate was 1$=26,5FF. See: R. Cameron, *A Concise Economic History of the World* (Oxford: Oxford University Press, 1997), p. 353.
the 1913 level. The number of farmers decreased from 8,777,000 in 1906 to 7,097,000 in 1936.15

Industrial production increased during the 1920s. Steel production increased between 1920 and 1929 from 3 million to 9.7 m. tons. Car production increased from 40,000 to 254,000 respectively. Iron bars production increased from 3.4 m. tons to 10.3 m. tons respectively.16 Steam power was replaced by electrical power across industries and enterprises introduced more tool machines replacing labour force.17

Debt continued to remain an economic problem. In 1920, French debt was 255.2 billion FF (from those the 36 billion were external debt), in 1926 it was 328.6 billion FF. This increase was mainly financed throughout the period by excess money supply. To illustrate, in 1925 a scandal broke out when it was revealed that the government had forced the Bank of France to print more than 41 billion francs which was the maximum limit according to the Decree of September 28th 1920. Practically concealed additional money supply was used as a way to finance the debt which continued to be high.18

The global crisis of 1929 had immense negative ramifications for the French economy. According to Cameron, the economic decline lasted longer although it started in 1933.19 In 1938, industrial production was just 83% compared to that of that of 1928, construction was just 61% and steel production was just 64% respectively. French car production was behind that of Britain and Germany, French airplane production was below that of Britain, Germany and the USSR. Finally, French steel production increased just by 30% during 1932-1937 whereas the German production was increased by 300% over the same period. Coal production was also reduced because Saar region

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19 R. Cameron, A Concise Economic History of the World (Oxford: Oxford University Press, 1997), p. 360. According to Farwell Bankwitz (1967), the index of industrial production reduced from 88.9 in 1931 to 68.8 in 1932, and the national income was reduced from 369 m. FF to 344 m. FF. The balance of payments deficit increased from 1.6 billion FF to 4.9 billion FF over the same period. See: Philip Charles Farwell Bankwitz, Maxime Weygand and Civil-Military Relations in Modern France (Harvard University Press, 1967), pp. 87-88.
was re-occupied by Germany.\textsuperscript{20} The annual average GNP growth rate during the period 1922-1937 was just 1.8\% and in 1938 the National Income was 18\% smaller compared to that of 1929.\textsuperscript{21} Unemployment increased from 11,000 in 1926 to 13,000 in 1930, to 308,000 in 1932, 345,000 in 1934, 431,000 in 1936 reducing only to 375,000 in 1938. The reduction of unemployment from 1936 to 1938 was not the outcome of healthy economic growth but from administrative legislation which stipulated that the maximum weekly working hours were just forty. However the reduction of the working hours in the major industries (iron, steel, construction etc) did not generate new jobs and the reduction was not associated with lower wages; a development which increased production costs, inflation and resulted in lower exports. The result was a higher balance of payments deficit. The average annual deficit during the 1931-1937 period was £29 m., as opposed to the previous 1926-1930 period were there was an annual surplus of £44 m.\textsuperscript{22} In May 1935 in just ten days time a total of 6.3 billion FF were invested abroad and in October 1936 the FF was devalued. By 1938 the FF had just the 36\% of its 1928 value. In 1939 the exchange rate between the FF and the German Mark (RM) was 8 FF=1 RM.\textsuperscript{23}

Fischer writes that, during 1918 and 1939, France had 40 governments and from those 5 were just in one year during 1933. The political situation was chaotic and by the middle of the 1930s the French industrial production was lower compared to that of 1913. Prices doubled in four years time between 1935 and 1939.\textsuperscript{24}

On 28 December 1938, the French Economics Minister Lacroix remarked: “The collapse of the French system does not date from the events of September (i.e. Munich). Its origin is the fact that France neglected too much the economic side of the struggle for

\textsuperscript{23} A-F. Ponce:, “Europe towards war”, in \textit{History} Part A, 64 (October 1973); pp. 12-21, especially p. 17 (in Greek).
influence”.25 This phrase demonstrates that French internal economic weakness had broader ramifications.

France in the Inter-war years 1919-1939: Military and foreign policy developments.

The developments in the military apparatus, in the military-industrial complex and in defence spending were complex, chaotic and inconsistent. Although the individuals which shaped the French defence policy remained the same in most years government’s priorities changed and shifted many times for various reasons. Ross (1990) provides an excellent description of French human political capital in the security area pointing out that:

During the 1930s an experienced cadre of politicians was responsible for the country’s security. Despite the accusation that the regime suffered from constant political turmoil, France in fact enjoyed adequate governmental stability...During the late ’30s only three men served as premier: Leon Blum, ...Camille Chautempts ...and Eduard Daladier...leading diplomatic and military posts were also held by a small group of experienced leaders. Only three men – Yvon Delbos, Joseph Boncoeur and George Bonnet – served as Minister of Foreign Affairs between 1936 and 1939. One man, Alexis Leger, occupied the post of Secretary General, the highest permanent civil service position at the Quai d’ Orsay. Military leadership was also stable. Two individuals – Maxime Weygand and Maurice Gamelin – led the French Army throughout the 1930s, and Gamelin as of January 1938 also served as Chief of the Staff of National Defence with the authority to coordinate the wartime activities of all three services...The Foreign Ministry was a small organisation – 686 officials in 1935...[with] 26 army, 11 air and 10 naval attaches [whose mission was] to obtain a wide variety of military information including everything from order of battle data to details of uniforms and equipment ...The Service de Renseignements dealt with covert intelligence collection...By the late

1930s the Service had some 1,500 agents in Germany...”.  However the military apparatus failed to produce the anticipated results.

Military Doctrine, Army developments, defence spending and defence industry.

On 1 July 1920, France had an army of 900,000 men and, in 1921, the force was slightly reduced to 850,000 strong. The Treaty of Versailles imposed a small Army of 100,000 men on Germany thus France enjoyed a 9:1 superiority. The reality was different since immediately after the war 157,000 French soldiers were an occupation force inside Germany, but during the period 1925-1926 France was engaged in various military adventures in Morocco, Syria and Indochina. In these fronts France send more than 300,000 men, thus the real number of soldiers actually deployed in Europe was smaller. The number of infantry divisions was reduced from 32 to 27 and the time duration of the military service decreased from 18 to 12 months. However in 1923 France had the biggest tank force in continental Europe with 2,600 tanks according to official French sources; whereas according to the Soviet intelligence estimates the number was double around 5,000-6,000. During the 1920s decade the plans of the French army were offensive. The “Plan T”, of 1920, the “Plan P”, of 1921, the “Plan A” of 1924 and the “Plan A+” of 1926 all endorsed offensive action against Germany and gave emphasis in tank and mobile armor divisions.

The 1930s would completely change this situation. To begin with, the memories from previous wars created a “culture of defeat.” France had faced German troops many times in the battlefield. In the Seven Years War, 1756-1763, the French were defeated by the brilliant strategy of Friedrich the Great. They took their revenge in the 1805-1806 period with the great Napoleonic victory at Jena and the subsequent subordination of Prussia. However, in 1815, the French were defeated at Waterloo not only by Wellington’s army but by Prussian intervention. The catastrophic 1870-1871

war followed and the victory of 1918 was at such price that it was regarded as pyrrhic. Under these circumstances, the French doctrine placed emphasis on defence rather than attack. This defensive strategy was endorsed by many senior French generals including the “father of the 1918 victory,” General Petain. In 1929, French Prime Minister Poincare allocated 20% of government spending to defence. Minister of Armaments Paul Painleve and the General Stuff decided to create a long defence line across the French-German borders. On 14 January 1930, the law for the creation of the “Maginot Line,” at a cost of 3,000 m. FF was endorsed. Many low ranking officers objected to this policy and stressed that the money should be spent financing new tank and mobile divisions. Among those objecting was the future leader of France, Charles de Gaulle. However, the objections were marginalised and, by 1935, the construction of the Maginot Line had cost the astonishing figure of 7,000 m. FF, more than double the initial budget for fortifications across 87 miles. However, the line did not cover the 250 miles, long border line between Belgium and France. The reason was political since this would gave the wrong signal to Belgium that France would not guarantee the country in case of a German attack. Thus, the French would fight along with the Belgians just as in the 1914-1918 period. The Maginot line was extended towards the town of Maubeuge where the old fortifications were modernised and in the regions of Metz and La Lauter. There was the “little Maginot,” the Alpine defences and additional coastal defences in the south against Italy. The construction of the line absorbed 150,000 tons of steel, 1,500,000 cubic meters of concrete, 12,000,000 cubic meters of earth soil, there were 100 km. of tunnels and 450 km. of underground rail networks and roads.

However, it was not just the ghosts of the past and economic inferiority which dictated the endorsement of a defensive strategy. The decision was also associated with demographic factors. The French planners pointed out that there was a major demographic imbalance between Germany and France (approximately 45 million

30 For an overall discussion of the cultural factor, see, Elizabeth Kier, “Culture and Military Doctrine: France between the Wars,” International Security 19, 4 (Spring 1995): pp. 65-93. It is interesting that the French public opinion endorsed a more offensive attitude and supported offensive operations but it was marginalised just as the low ranking officers.


French as opposed to 65 million Germans). With the annexation of the Saar region, Austria, and Sudetenland (not to mention the whole of Czechoslovakia) by the end of the 1930s, the demographic imbalance was further increased to 45 million French as opposed to 72-75 million Germans. The classes of cadets of 1934-1940 years, of Germany and France, demonstrate vividly this argument. The number of German conscripts of the 1934-1940 period (those born between 1914-1920) numbered 3,172,000 men whereas the French conscripts of the same period numbered only 1,574,000 men. Thus Germany could deploy an army more than double the size of France’s. Under these circumstances, the endorsement of defensive strategy was the “correct” decision.

Between 1929 and 1934, French armaments spending decreased due to the Maginot line construction. In 1934, over a billion FF was cut from defence and, after 1935, economic growth was slow due to fiscal and political constraints. However, as a percentage of GNP, French spending was higher to that of Germany. In 1932, French defence spending was 5.2% of GNP as opposed to only 1.9% in Germany and, in 1935, French spending was 5.8% as opposed to 6% in Germany. After March 1936 when Germany occupied the Rhineland, the French re-armament intensified. In September 1936, a new 14 billion FF re-armament programme was announced. In March 1938, after the annexation of Austria to the Third Reich, an additional four year armaments plan of 12 billion FF was announced, placing emphasis on artillery and anti-aircraft defences. Thus, French defence spending increased from 20% of government spending in 1934 to more than 33% in 1938. New armaments expenditure for the Army were decreased in 1932 by 300 m. FF; in 1933, they were further decreased by 1,053,000,000 FF. In 1934, armaments expenditure were just 400 m. FF, when the Army had requested 600 m. In 1935, a total of 800 m. FF, were allocated to the Army for new armaments and in the end of the year additional sums of 568 m. FF were allocated. In the following years, Army re-armament increased further. Turning to defence spending at constant 1938 prices we have the following figures. (Table 1).

Table 1: French Defence spending (1932-1939) (in m. FF constant 1938 prices)

<table>
<thead>
<tr>
<th>Year</th>
<th>War Ministry</th>
<th>Naval Ministry</th>
<th>Air-Force Ministry</th>
<th>General Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1933</td>
<td>12,010</td>
<td>4,194</td>
<td>2,554</td>
<td>19,897</td>
</tr>
<tr>
<td>1934</td>
<td>10,212</td>
<td>4,539</td>
<td>2,231</td>
<td>18,126</td>
</tr>
<tr>
<td>1935</td>
<td>11,180</td>
<td>5,075</td>
<td>4,035</td>
<td>21,507</td>
</tr>
<tr>
<td>1936</td>
<td>11,941</td>
<td>5,358</td>
<td>4,090</td>
<td>22,708</td>
</tr>
<tr>
<td>1937</td>
<td>13,423</td>
<td>5,247</td>
<td>4,648</td>
<td>24,523</td>
</tr>
<tr>
<td>1938</td>
<td>15,227</td>
<td>6,143</td>
<td>6,645</td>
<td>29,153</td>
</tr>
<tr>
<td>1939</td>
<td>53,668</td>
<td>9,897</td>
<td>23,904</td>
<td>88,584</td>
</tr>
</tbody>
</table>


Although re-armament spending was accelerating, the real impact on the military balance was not what the Generals anticipated. In addition, as a percentage of government spending, defence spending was slightly reduced (21.4% in 1925, as opposed to 20.5% in 1935). The implementation of re-armament plans was slow due to various bureaucratic rigidities, financial constraints, technological barriers, political antagonisms and even self opportunist strategies. To illustrate, the decision for mass production of new rifles which aimed to replace the old Lebel rifle was made in 1926, but it took ten years to start implementing the program. The plans for the anti-tank guns of 47mm, existed in 1935. However, no mass production occurred because the Artillery branch debated endlessly about the correct caliber of the new anti-tank guns. Tank production was the biggest failure. The production of tanks in 1934 and 1935 was practically non existent; only 3 BI-type tanks were made in the first year and another 50 of all types were made in that second year! In 1936, the French industry produced 467 tanks; in 1937 482 tanks; in 1938 403 tanks; in 1939 1,059 tanks; and during January-June

1940 854 tanks. The best French tank was the BI-type. This was heavily armed and had a good protection. However, the speed was slow and the rate of fire was low, compared to the German tanks. In 1939-1940, the BI-type was just 11.3%, of overall French tank production. Tanks were regarded as a support arm for the infantry and not as a major attack weapon. To make matters worse, the French heavy and defence industry was outdated since the machine tools of the French industry were on average 20 years old in 1940, while the machine tools of German factories were on average just 7 years old. Hotchkiss, a French industry leader, was still operating manually in many departments of its armaments factories just as in the 1890 decade!\(^39\) The industrial unrest of the 1936-1937 years and mass strikes added more problems to the defence industry. In addition, the number of machine tools in the industry was extremely low. Thus, in 1938, there were 550,000 units of all metal-working (cutting and forming) machine tools in the French industry as opposed to the 1,614,000 machine tools in the German industry.\(^40\)

**Air-Force and Naval Policy Developments and Armaments**

Two-thirds of the French air force was decommissioned in 1919 and personnel numbers decreased from 200,000 men in 1919 to just 10,000 in 1920. In September 1928, the Air Ministry was established but by that time the French aircraft industry had lost its competitive advantage which was now held by the US and Germany. Until 1933, the French Air-Force had many planes but of low quality.\(^41\) After 1933, the situation deteriorated due to limited funding. In 1934, the Air-Force started to implement the “Plan I” which would provide, theoretically, 1,343 airplanes. However, financial constraints meant these airplanes would have to be capable of multiple roles, including bombers, fighters and/or reconnaissance (BCR). Forty different production companies were involved in the project and the outcome was chaotic. The industry and the Air Ministry wanted a multi-purpose design which simply could not be produced due to the old technology and the outcome was poor with limited BCR capabilities. The Plan II followed in September 1936 which aimed to produce 1,339 bombers and 756 fighters. However the aircraft industry was paralysed. Between October 1937-March 1938 the average aircraft monthly production of was reduced from 40 to 35. From 1936 the


German Air-Force bypassed the French. In 1937 the Commander of the French Air-Force remarked that in case of war the French Air-Force would be obliterated in few days time. In March 1938, the new “Plan V” was announced which aimed to double the airplane production and have a better analogy of fighters and bombers (41% versus 34% respectively). The V Plan was modified twice once with the Munich agreement and with the war declaration of September 1939. Monthly airplane production increased from 41 pieces (November 1938) to 298 pieces (September 1939). Between, January 1938-June 1940, a total of 4 billion FF. were invested in the aircraft industry. The developments are presented in Table 2.

Table 2: Planned French Airplane production (1934-1939)

<table>
<thead>
<tr>
<th>Plan</th>
<th>Starting date</th>
<th>Planned number of airplanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan I</td>
<td>April 1934</td>
<td>1,343</td>
</tr>
<tr>
<td>Plan II</td>
<td>September 1936</td>
<td>2,851</td>
</tr>
<tr>
<td>Plan V</td>
<td>March 1938</td>
<td>4,739</td>
</tr>
<tr>
<td>Plan V (1st amendment)</td>
<td>March 1939</td>
<td>5,133</td>
</tr>
<tr>
<td>Plan V (2nd amendment)</td>
<td>September 1939</td>
<td>8,176</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>22,242</td>
</tr>
</tbody>
</table>


Table 2 demonstrates that the planned aircraft production for the 1934-1939 period was for 22,242 pieces. This was never materialized and the overall production of the 1933-1939 period was just 8,763 pieces. The number of workers in the airplane industry increased from 21,500 in November 1934 to 35,200 by December 1936; 48,000
by May 1938; 171,000 in January 1940; and 250,000 in May 1940.\textsuperscript{42} The French Navy, in 1919, was second to that of Britain. The Washington Treaty of 1922 imposed parity between French and Italian naval forces. This was rejected by France who decided to construct vessels which were not included in the Treaty like submarines and cruisers. During the period 1924-1934, France constructed vessels of 350,558 tons.\textsuperscript{43} The Navy benefited from the stability of personnel as the Naval Minister Georges Leygues was in this crucial post under ten different governments during the periods 1925-1930 and 1932-1933 respectively. In addition the Heads of the Navy managed to convince the governments that Naval armaments spending had priority over the Air-Force for long time. Thus, in 1939, France had the biggest navy in continental Europe.\textsuperscript{44} The French planners considered the navy important since France was dependent on imports of critical raw materials. France had to import 99% of its copper, 99% of its oil 95% of its tin and 100% of its manganese. The French believed that in case of war, the navy, despite its strength, could not simultaneously provide support to civilian shipping and defend it from submarines, protect the shores of France and engage in heavy activity against enemy surface vessels especially against the Italian Navy in the Mediterranean.\textsuperscript{45}

Foreign Policy developments and the failure of French geopolitical design

France, in the 1920s, established multiple military alliances aiming to encircle Germany. On 14 August 1920, an alliance was signed between Yugoslavia and Czechoslovakia in order to face Hungarian revisionist policies and three days later Romania entered the alliance. This was the “Small Entente” and was created under French guidance. The ultimate aim was not Hungary but Germany. In January 1921, France officially endorsed the “Small Entente” by signing bilateral treaties with the three member states. Earlier, on 7 September 1920, a French-Belgian military alliance was signed. On 19 February 1921, a French-Polish Alliance was signed, and in January

\textsuperscript{42} Julian Jackson, \textit{The Fall of France. The Nazi Invasion of 1940} (Oxford: Oxford University Press, 2003), pp. 18-19.


\textsuperscript{44} J. F. V. Keiger, \textit{France and the World since 1870} (London: Arnold editions, 2001), p. 58.

\textsuperscript{45} Steven Ross, “French Net Assessment” in \textit{Net Assessment in the 1930s}, eds., Allan R. Millet & Williamson Murray (Washington: Defence Supply Service, October 1990), pp. 107-184, especially p. 120.
1924 discussions started for the signing of a French-Czechoslovakian alliance, which was completed in 1925. A French-Romanian Pact was signed on 10 June 1926, and was followed by a French-Yugoslavian on 11 November 1927.\textsuperscript{46} Thus, with this network of alliances and with the domestic armaments doctrine, by the end of 1920s France enjoyed complete military superiority over Germany and was the biggest military power in continental Europe.

Germany reacted to the French strategy by signing the Treaty of Rapallo on 16 April 1922 with the USSR. France reacted a few months later by invading and occupying the Ruhr. However, the French foreign policy moves of the “small Entente” and the Ruhr occupation were accepted with scepticism by Britain and the USSR.\textsuperscript{47} The British, extremely sceptical about the German-Soviet alliance, decided to intervene between France and Germany. The outcome was the Locarno negotiations of 5-16 October 1925 in Switzerland which resulted in the official Treaty on 1 December 1925, signed in London. According to Article 2, Belgium, France or Germany could not use military force against each other. However, this was in reality a great German victory as the German Army of 100,000 could not threaten Belgium or France. Practically, the Article was a signal to France to that a policy similar to the occupation of the Ruhr could not be repeated. After Locarno, Germany entered the League of Nations. The British and the French thought that an anti-communist alliance against the Soviet Union was established in Europe and Germany was no an ally of London and Paris. The three foreign ministers, Aristide Briand of France, Gustav Stresemann of Germany and Austen Chamberlain of Britain, were awarded the Nobel Peace Price in 1925. The reality was, however, different since the allies did not know that from October 1925 in the pilots of the new German air force were training at a secret air base in the Soviet region of Lipetsk. The German-Soviet military cooperation was extended to arms procurement, design and technological exchange.\textsuperscript{48}

After the rise of Hitler in January 1933, the French foreign policy aimed to establish a second “small Entente” with the countries of south-eastern Europe. Thus during February and March 1934 the Balkan Pact was created with the participation of


\textsuperscript{48} Lipetsk was one of the secret joint Soviet-German training centres. Another one existed in Smolensk. Furthermore in the places of Tula and Fil), joint armaments production centres were established. In the region of Saratof a joint Soviet-German programme for chemical weapons was under way. In the region of Kazan tank units were jointly produced. Finally in the regions of Leningrad and Zlatoust arms were jointly produced. See: M. Gilbert: “The Routledge Atlas of Russian History”, third edition, London, 2002, p. 101.
Yugoslavia, Romania, Greece and Turkey. The immediate policy goal was to check the aspirations of Bulgaria; however the ultimate goal was to stop the penetration of Italy in the region via Albania and the German aspirations. However the Balkan Pact failed to achieve its goals since Greece with a Friendship Treaty with Italy from 1928 did not want to provoke Rome. Turkey, on the other hand, suspected that it had an anti-Soviet character and did not want to provoke the USSR. Thus both states insisted that the Pact was directed only against Bulgaria.\(^{49}\)

On 13 January 1935, 91% of the inhabitants in the Saar region decided to unite with Germany, and on 16 March 1935, Germany announced a new re-armament policy officially thus abandoning officially the Versailles Treaty and the obligation for a 100,000 men army strong. France reacted by signing the French-Soviet Pact, 2 and 14 May 1935, in Paris and Moscow. Kissinger points out that the French move was a significant mistake for three reasons: First a closer French-Soviet cooperation made the British-French relationship weaker. Secondly although the French-Soviet Pact was political many Eastern European states allied to France felt that there was no French guarantee any longer from a Soviet threat against them, thus they had to find a new ally to secure their borders. This could be one state: Germany and thus the German penetration in Eastern Europe and the Balkans became greater it was not just economic but it was also political and military. Finally Germany was de-satisfied and assuming that a new encirclement could occur similar to that of the 1904-1914 period would speed its war preparations.\(^{50}\)

The British reacted to the French-Soviet Pact by signing, the British-German Naval Agreement on 18 June 1935, the anniversary of the Battle of Waterloo, allowing the German Navy to have 35% of the British surface vessels and 45% of the British submarines.\(^{51}\) To make things worse, on 3 October 1935, Italy invaded Abyssinia. Months earlier, on 25 January 1935, Italy had informed France of her intentions and the French Foreign Minister did not object. France was willing to give to Italy 113,000 square km in western Libya and 800 square km near Djibouti; in exchange Italy would cooperate with France and guarantee the territorial integrity of Austria from any

\(^{49}\) 1) V. Theodoropoulos: “The Turks and We”, Fitrakis editions, Athens, 1988, p. 120-122 (in Greek), 2) W. Hale: “Turkish Foreign Policy 1774-2000”, Frank Cass, 2000, p. 60-62.
German annexation attempt. Britain however opposed Italian plans fearing a military threat to Suez Channel and thus the French-British schism became wider.

However, both Britain and France were blind to the situation. Britain needed a strong Germany in order to balance the Soviet threat in Europe but did not realize the depth of the German-Soviet relations. France, on the other hand, accepted the rationale of the communist threat but its priority was to check Germany. Thus, in French eyes, Italy was a useful ally. The democracies were really blinded.

The Abyssinian crisis gave different lessons to Berlin. When Hitler saw that the Western democracies did not react to Italy, he obviously deducted that they would not react to Germany. Thus, on 7 March 1936, 35,000 German troops crossed the Rhine bridges in an area which, according to Versailles, should be a de-militarized zone. There was no Western response and by 29 March the local population accepted the German military presence by 99% in a referendum. France wanted to react but the British opposed any military or economic measures against Germany. On 11 July 1936, Hitler made the first step for the future annexation of Austria with a bilateral treaty which practically transformed Austria to a satellite state. Few days later, on 18 July 1936, the Spanish civil war erupted. When the war erupted the legal Spanish government had under its control the total gold reserves of the state (635 tons which were valued at $715 m). Under the circumstances the victory of the government over the rebels looked certain but soon external intervention favoured Franco. The Spanish government requested military armaments and supplies from France. France immediately provided 13 Dewoitine fighters and 6 Potez-54 bombers. However these airplanes were given without arms, pilots and support personnel. The Spanish government was forced to spend 50,000 FF every month for pilots, 30,000 FF for observers and 15,000 FF for technical support. In addition, France failed to provide light arms forcing Spain to seek imports from Mexico which in spite of its oil crisis with the West provided to the Spanish government 20,000 Mauzer type rifles with 20 million rounds of ammunition and huge quantities of food supplies. Franco was reinforced quickly with 50,000 Italian and 16,000 German troops and huge quantities of supplies. Private firms in the US, Britain and France also supported the rebels; whereas the Spanish government enjoyed the support of the Soviet Union. Total Soviet military aid to the Spanish government included 2,150 field artillery guns, 120 anti-aircraft guns, 10,000 machine-guns, 400,000

54 These included 20 Potez type bombers, 8 Schneider guns of 155mm, Hotchkiss type machine guns, Lebel rifles, ammunition, grenades and other equipment.
rifles, 260 fighter planes, 150 bombers, 300,000 artillery shells and other material. This aid was shipped to Spain from Murmansk but when the Soviet vessels reached the port of Bordeaux, the French authorities forbade any further transport towards Spain on 15 January 1939. At the same time, the French authorities refused to deliver 2,000 machine guns and 100,000 rifles requested by the Spanish government. Although total Soviet aid (military, humanitarian etc) to the Spanish government during the war was $661 m., in reality it was just $143 million as the Soviets requested the transfer of Spanish gold reserves to the USSR. The Spanish government was forced under the circumstances to deliver gold worth of $518 million to Moscow. Due to the Spanish gold, the exchange rate between the USD and the Russian rouble improved from 5.3 rubles to $1 to 2.5 roubles per $1.55 Basically, the Spanish government had no assistance and by 1939 the war terminated with another Axis victory. France had in its south a hostile regime and the astonishing issue was that it had help towards this development. When the Spanish civil war was over, Germany had already achieved additional victories. On March 12 1938, the German Army invaded Austria and the Union (Anschluss) of Germany and Austria was proclaimed. Ranki (1993) points out that the occupation of Austria provided to Germany 460 m. RM in gold and foreign currency from the Austrian central bank, huge quantities of raw materials (oil, copper, iron ore, tin, lead, molybdenum, and even foreign money deposited in Austrian banks worth of 900 m. RM. In addition 243 Austrian firms were immediately used in the German re-armaments program and food supplies increased by 30% to 50%.56

According to the official German History of the Second World War, in 1937 Austrian oil production was 32,900 tons, and in 1938 increased to 56,700 and in 1939 it was 144,300 tons. Iron production was 1,880,000 tons in 1937, 2,660,000 tons in 1938 and 2,971,000 tons in 1939. The Germans captured Foreign exchange reserves of 986 m. Austrian schillings and 493 m. RM. From Austrian banks the Germans confiscated another 1,750 m. schillings. (the exchange rate was 1 Austrian schilling=0.47 RM.)57 After Austria Hitler did not waste any more time, and on 21 April 1938, he officially demanded an adjustment of the German-Czechoslovak border line. The Czechoslovak government rejected the German ultimatum and the Czechoslovak army of 45 divisions, with 469 tanks, 2,000,000 men and 1,582 airplanes was deployed against the German

military machine which at that time it had 47 divisions, 720 tanks, 2,200,000 men and 2,500 airplanes.\textsuperscript{58}

The evolving crisis was very serious since, as with the Treaty of 1925, France guaranteed the territorial integrity of Czechoslovakia. The Soviet Union was also interested. On 9 May 1938, the Soviet Foreign Minister stated that Moscow would assist Czechoslovakia if the Polish and Romanian governments allowed the pass of Soviet troops. It was an obvious propaganda ploy since both countries would not allow the entry of the Red Army. However, the statement provoked Western reaction. On 23 May 1938, Britain informed France that no military action could be undertaken against Berlin. After this development, the French Quai d’Orsay (Foreign Ministry) informed the Czechoslovak ambassador that France would not engage in war with Germany over the Sudetenland issue on 20 July 1938.\textsuperscript{59} Finally, the Munich Agreement was signed on 29 September 1938 between Italy, Germany, France, Britain without the participation of Czechoslovakia. According to the treaty, the Sudetenland was granted to Germany. This meant that Germany gained 41,098 square km. and 4,879,000 inhabitants. The region had 70\% of Czechoslovakia’s iron and steel production.\textsuperscript{60} What remained from Czechoslovakia was extremely vulnerable to further German advance since there were no fortifications across the new border line.\textsuperscript{61}

On 15 March 1939, the German army advanced and occupied the remaining of the country. Poland and Hungary benefited from the developments. The former added around 1,000 square km. whereas the latter gained almost 12,000 square km.\textsuperscript{62}

According to Hehn the looting of Czechoslovakia provided to the Germans: 1,582 airplanes, 469 tanks, 500 anti-aircraft guns, 2,175 field guns, 1,090,000 rifles, 114,000 pistols. These supplies could arm 30 divisions, almost 50\% of the German Army. The Czechoslovak armament supplies were of high quality and was one of the best across Europe. The Germans also captured more than $100 million in gold from the Czechoslovak National Bank, almost $300 million in foreign currency reserves and


\textsuperscript{60} D. Evans & J. Jenkins, Years of Weimar & the Third Reich (Hodder & Stoughton, 1999), p. 394.


\textsuperscript{62} William L. Shirer, The Rise and Fall of the Third Reich, Volume 1 (Athens: Arsenidis editions) p. 629 (no publication date).
around $1 billion in raw materials and industrial goods. In just one year, from 12 March 1938 to 23 March 1939, Germany occupied Austria, Sudetenland, Bohemia, Moravia and Memel, all peacefully. A total of 10,250,000 inhabitants were added to the Reich (6,750,000 Austrians, and 800,000 Czechs).

On 22 May 1939, Berlin and Rome signed the “Pact of Steel”, a formal military alliance, the first time since 1918 that Germany concluded a military pact. Then Hitler officially sought the return of East Prussia and the “Polish Corridor.” Hitler did not fear any Western involvement in Poland but he was worried about Soviet intentions. He concluded the German-Soviet Non Aggression Pact on 23 August 1939. It had a ten year duration and secret clauses which dichotomised Eastern Europe to Soviet and German spheres of influence.

The Pact was Hitler’s greatest error. Between 1919 and 1939, the British foreign policy was pro-German. Britain accepted the re-birth of German economic power, accepted the German re-armament, and the German expansion in Eastern Europe and even the totalitarian regime of Hitler for one reason only. The British expectation was that Germany and the USSR would sooner or later fight for the dominance of Eastern Europe, allowing France and Britain to avoid war. However, the German-Soviet Non Aggression Treaty changed the geopolitical landscape. It was obvious that after Poland Germany would turn to West and not to the East. Poland had to be protected. On 1 September 1939, German forces entered Poland and on September 3rd Britain and France declared war on Germany. The dance of death would start again exactly twenty years since the lull of 1919 just as the French General Foch had predicted.

**War and Economic mobilization (1939-1940)**

Given the previous developments, the war declared on 3 September 1939 was an inevitable outcome. In spite of their previous errors, the Western Allies benefited from

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the fact that after the Polish campaign the strategic priorities of Germany shifted to Scandinavia. Practically nothing happened on the Western Front between September 1939 and May 1940, allowing France precious additional time. Furthermore, its colonial empire stood behind France, which, in 1939, covered 7,709,926 square miles and a population of 112,479,452 million inhabitants. However, the mobilization failed.

Military Power and Mobilization in 1939

In 1939, the French Army deployed 900,000 men. After mobilization, the total strength was 2,680,000 men. Another 1,640,000 men served in the National Guard and the paramilitary forces. The Army suffered from poor telecommunications. Between 1923-1939, just 0.15% of the military budget was invested in telecommunications and even less in R&D. France had 75 infantry divisions and 13 fortress divisions, 5 light cavalry divisions and 40 tank battalions. Each infantry division had 3 regiments, 2 artillery regiments, 1 battalion of military engineering. The light armaments of the infantry were old. France enjoyed limited superiority over the Germans in tanks and complete superiority in artillery with 11,200 guns, against 7,710 of Germany. The French had just 270 anti-tank guns of 47mm in September 1939 which increased to 1,270 guns in May 1940 when the German attack started. The mobilization was extended to the defence industry and many specialized workers were send to the front. To illustrate, in the first days of September 1939, the number of workers at Renault declined from 35,000 to 12,000. According to Keiger, in September 1939, French armaments program planning was under way assuming that a war with Germany would start in 1941. Similar conclusions were reached by Jackson who points out that, although the situation between September 1939 and May 1940 was improved, the French military leadership was planning with 1941 as the milestone and believed that until then any German attack would perish at the Maginot line.

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Palermo points out that in 1939 France had 1,300 planes most of them obsolete. There were just 200 modern bombers from those the 159 were operational and few fighters.\textsuperscript{70} Ellis provides the following data: France had 1,368 airplanes (637 fighters, 242 bombers, and 489 reconnaissance planes). From the 1,368 planes only the 1,145, were operational and from those the 243 were obsolete.\textsuperscript{71}

Turning to the Navy in 1939, France had 2 modern cruisers of 26,500 tonnage each, 5 old battleships which were modernised, 7 modern cruisers of 10,000 tonnage each, 32 destroyers, 70 submarines, 1 aircraft carrier and under construction there were 4 battleships of 35,000 tonnage each and 2 aircraft carriers. With the exception of the 5 old battleships, all ships were less than 13 years old. Anti-aircraft protection was problematic.\textsuperscript{72} Ellis points out that France had 1 aircraft carrier, 7 battleships, 19 cruisers, 70 destroyers and 77 submarines.\textsuperscript{73}

\textit{Economic and Industrial Mobilization 1939-1940.}\textsuperscript{74}

The French war spending between 1 September 1939 and 31 August 1940 total was 263,000,000,000 FF. Of that, 25.1\% was financed from the Central Bank by increasing the money supply and 28.9\% was financed from additional taxation. Money supply increased from 211 billion FF in August 1939 (142 billion in circulation, 65 billion bank deposits, 4 billion other liquidated assets) to 354 billion in August 1940 (221 billion in circulation, 122 billion bank deposits, 11 billion other liquidated assets). Taxation for both individuals and enterprises increased.

The domestic production or raw materials in 1939 covered 67\% of coal needs, 5\% of lead needs, 5\% of tin needs, 6\% of phosphorus, and 1\% of oil. There was only one oil well in the Alsace region with an annual production of just 70,000 tons and the reserves were shrinking. The annual domestic consumption was 6,900,000 tonnes. Domestic textile production covered 100\% of consumption in leather goods, 12\% of silk, and 8\%

\textsuperscript{73} John Ellis, \textit{The World War II Databook} (Aurum Press, 1995), p. 245.
of wool. Iron was also in short supply. Before the war, France had a monthly consumption of 60,000 tonnes of iron and exported 500,000 tons annually. When the war broke out, the monthly consumption increased to 250,000 tonnes. Across France, households had to contribute by providing all types of metals, but even then the collected quantities were not used due to transportation problems. To illustrate, by May 1940, 85,000 tonnes of metal were collected but only 45,000 tonnes had made to the triage centres. In defence industrial mobilization, both airplane and tank production was low. There was a huge difference between planned and actual production for airplanes throughout the October 1939 - May 1940 period (Table 3).

Table 3: Airplane production (1939-1940)

<table>
<thead>
<tr>
<th>Month</th>
<th>Planned Production</th>
<th>Actual Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 1939</td>
<td>422</td>
<td>254</td>
</tr>
<tr>
<td>November 1939</td>
<td>615</td>
<td>296</td>
</tr>
<tr>
<td>December 1939</td>
<td>640</td>
<td>314</td>
</tr>
<tr>
<td>January 1940</td>
<td>805</td>
<td>358</td>
</tr>
<tr>
<td>February 1940</td>
<td>1,066</td>
<td>279</td>
</tr>
<tr>
<td>March 1940</td>
<td>1,185</td>
<td>364</td>
</tr>
<tr>
<td>April 1940</td>
<td>1,375</td>
<td>330</td>
</tr>
<tr>
<td>May 1940</td>
<td>1,678</td>
<td>434</td>
</tr>
<tr>
<td>Total</td>
<td>7,786</td>
<td>2,629</td>
</tr>
</tbody>
</table>


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Table 3 demonstrates the immense difference between planned and actual aircraft production (7,786 versus 2,629 actually delivered). In May 1940, France had 1,286 planes (632 fighters, 262 bombers, 392 reconnaissance planes) while Germany had 3,530 airplanes (1,210 fighters, 1,680 bombers, 640 reconnaissance planes). France had just 3,800 medium and heavy anti-aircraft guns while Germany had 9,300.76

France had the seventh largest commercial navy fleet in 1939 in the world with 502 ships of 2.6 million tonnage. By 1942, almost 25% of French commercial ships were being used by the Allies, and the British had 400,000 tonnes of French ships of under their control. Between September 1941 and February 1942, French ships transported 590,000 tonnes of supplies to the Allies. The remaining French fleet was under the control of the Vichy government and, in November 1942, the Germans and the Italians confiscated French ships of 290,000 tonnes. Furthermore, another 20 ships were confiscated by the Japanese in Asia.77 According to one source the total cost of the 1939-1945 war for France was 40,000 billion FF (in 1949 prices), or 2-2.5 billion FF per day.78

Re-assessment of French interwar policies under the theory of New Institutional Economics

The theory of NIE demonstrates that state success is associated with constant economic growth which is achieved when the following elements are present in a society:

- Efficient state mechanism which assists private investors, guarantees private investments and collects the taxes efficiently.
- Stable monetary environment of low inflation and efficient banking both an outcome of proper and efficient central bank structure and activity
- Efficient economic environment which is the outcome of social stability. In spite of the conflicting interests of various social classes the stability can be achieved if the institutions of the state and especially the Parliament legislates in such a way as to minimize social conflicts across various classes and has most citizens if not all happy.

• Low debt which allows states to use tax revenues for welfare, infrastructure and other purposes which will promote growth.

France, after World War I, started its new era with massive debt. This burden increased during the 1920s as the state had to finance military adventures overseas, maintain a strong army which had an offensive doctrine while at the same time it had to pay a great deal for the reconstruction of war-perished Northern France and for pensions to millions of orphans, widows etc.

In the 1920s, France attempted to balance the German threat with a mixed strategy of internal and external balancing. Internal balancing was associated with the offensive doctrine of the French armed forces and with the heavily armed land forces. External balancing was associated with a web of alliances with the countries of Eastern Europe including Czechoslovakia, Poland, Romania, and Yugoslavia in order to check any new German territorial aspirations in the East. These relations were not only military alliances. French exports and investments in these countries would cement the bilateral relations. Thus, both internal and external balancing had to be based on a strong economic background which was already questionable due to the high debt problem.

When the international crisis of 1929 started, the debt problem was not resolved. The crisis of 1929 created additional economic problems and very soon the crisis became social and then political. Under these circumstances, French policy changed completely. The offensive military planning of the 1920s was replaced by defensive planning, as evidenced by the Maginot Line creation. Thus, following an internal balancing strategy by keeping a strong army was not possible any more and the French could not finance an arms race with Germany. The continuance of external balancing with creating alliances was not possible since the economic crisis of France deprived the country of its ability to establish extensive trade and investment relations with the countries of Europe. To illustrate, the French share in industrial global production according to one source decreased from 6% in 1928 to 4.4% in 1938. According to another source, French share in industrial global production declined from 6.6% in 1929 to 4.5% in 1938. Foreign Direct Investment (FDI) in France in 1900 represented the 21.9% of global foreign investments; in 1914 the figure was 19.9% and in 1938 it was just

7%. During the same period, the British share was 51.1% in 1900, 44% in 1914 and 41.7% in 1938. The US share in global FDI was 2.1% in 1900, 7.8% in 1914 and 21.2% in 1938.\footnote{D. Held & A. McGrew, D. Goldblatt, J. Perraton, \textit{Global Transformations. Politics, Economics and Culture} (Polity Press, 1999), p. 193.} France, in 1933, had one third of global gold reserves.\footnote{Paul Beaudry & Franc Portier, “The French Depression in the 1930s”, \textit{Review of Economic Dynamics}, Volume 5, (2000): pp. 73-99 especially p. 75; Douglas A. Irwin, “The French Gold Sink and the Great Deflation of 1929-1932”, \textit{Cato Papers on Public Policy}, Volume 2, pp. 1-47, 2012. In this second source, the reader will find excellent data about the Bank of France balance sheet on page 21.} However, the inflow of capital did not stabilise the internal economy and on the other hand, the economic ties of France with other states shrunk.

It is obvious that the economic catastrophe of France in the 1929-1938 period had harmful ramifications in defence (internal balancing strategy) and foreign policy. The decline of French investments, especially in Europe, was quickly exploited by German capital which penetrated the countries of Eastern and south-Eastern Europe.\footnote{P. N. Hehn, \textit{A Low Dishonest Decade. The Great Powers, Eastern Europe, and the Economic Origins of World War II, 1930-1941} (London: Continuum, 2002); A. Teichova & P.L. Cottrell, eds., \textit{International Business & Central Europe 1918-1939}, (New York: Leicester University Press & St. Martin’s Press, 1983); G. Ranki, \textit{Economy and Foreign Policy. The struggle of the Great Powers for hegemony in the Danube valley 1919-1939} (New York: Columbia University Press, 1983).} With enhanced economic power, Germany gained additional political influence and minimised if not fully marginalised French influence. Thus, by the end of the 1930s, French external and internal balancing strategy towards Germany had failed, since the economic basis of the strategy did not exist.

**Concluding Remarks**

The theory of deterrence argues that, in order to preserve peace with an adversary which has more resources including manpower, wealth, industrial might etc., the smaller or weaker party can exercise a combination of internal and external balancing strategies. Although a victor in 1918, France, in the long run, remained a smaller and weaker state compared to Germany. In the immediate decade after the end of the war, from 1919 to 1929, France followed a nexus of internal and external balancing strategies. It continued to maintain the biggest arm forces in continental Europe and had an offensive military orientation, exercising pressure on Germany which, under the Versailles Treaty, could have a military force of just 100,000 men.
without any heavy weapons like artillery or tanks. In addition, France attempted via the Small Entente in Eastern Europe to check any German attempt to absorb the weaker states of the region. This strategy, in order to be successful, needed a sound economic basis which, however, France did not have. This was illustrated during the 1929-1939 period where France was forced, due to the economic crisis, to change its military doctrine from offensive to defensive and was unable to stop the economic penetration of Germany into Eastern and South Eastern Europe which eventually was capitalised on politically. Even when the war started, France had some time which it could exploited to better its position. Unfortunately, the economic and industrial mobilization between September 1939 and May 1940 was incomplete. The full potential of the French economy was not utilized and the Empire failed to contribute in both men, resources and raw materials. All these developments took place in the context of an enemy which was rapidly mobilizing between 1933 and 1940. Germany had also increased its economic power with the annexations of Austria and Czechoslovakia and then of Poland. Under these circumstances, the fall of June 1940 should not be attributed solely to military factors albeit the military’s crucial role at the tactical level. Rather, during the days of May and June 1940, the biggest military blunder of the French side was not the fact that they failed to appreciate the German plans which they accidentally possessed from 10 January 1940 when a German plane crashed near the town of Mechelen in the Dutch-Belgian border. The plane’s cargo contained fragments of the German plan. However, the Allies immediately believed that the plans were just a plot of the German intelligence and gave no attention to them.84 The biggest military error of the French occurred after the German penetration of the Ardennes. On 17 May 1940, the French Prime Minister Paul Reynaud decided to replace the Supreme Commander General Maurice Gamelin with General Maxime Weygand. This was a mistake because Weygand was the French military commander in…Syria and arrived on the 20th of May and took control that day!85 For three crucial days, the French Army did not have a supreme commander and this is the best example of problematic relations between civil and military authorities and how these relations affect war operations. The above is a clear demonstration that the civil-military relations did not function during the war period. It is certainly amazing that for three critical days the French Army did not have

a supreme commander. However, in spite of the military blunders, the economic forces shaped the victor and the defeated long before the war declaration.
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(*) Visiting Scholar Department of Turkish and Modern Asian Studies, University of Athens, 4 Dragatsaniou Street, Athens 105 59