

Conceptual understanding

Key questions

- At what point could the western powers challenge the Axis Powers in terms of military strength?
- What was the relationship of industrial power to military strength in 1939?

Key concepts

- Continuity
- Change
- Significance

Axis Powers

The Treaty of Versailles had placed severe restrictions on the size of the German army. This did not mean, however, that the German High Command was idle during the 1920s. The small officer corps undertook a thorough analysis of both the lessons of the First World War and what this meant for Germany in the context of Versailles restrictions. It was this analysis and subsequent doctrine that would structure the German military when it began to expand in the mid-1930s. The lessons that the German general staff took from the battles of 1918 were that flexibility, initiative and active combat leadership were the key to mobile warfare. Even before Hitler came to power, the German army had a plan for expansion beyond its Versailles restrictions.

In 1935 conscription raised the strength of the German army from its 100 000 men to 21 divisions. By the eve of war in 1939 it was 103 divisions – some three million men. These six divisions included armoured divisions boasting close to 2,400 tanks. The German air force, banned by Versailles, boasted over 4,000 aircraft in 1939. Likewise the navy also expanded both its surface and submarine fleets. Nevertheless, it is one thing to build and maintain a peacetime army and quite another to keep it supplied with men and material while fighting a modern war, and in 1939 many within the German command believed the German economy was incapable of sustaining a fight over the long term without the conquest of significant productive land. Over half of its government expenditure went to rearmament consuming over 15% of its GNP.

Throughout the war the Germans were famously handicapped by their Italian allies. Italy had suffered in the First World War without the compensation she deemed owed to her. The economic crisis that accompanied the peace brought Mussolini to power, with his chaotically dangerous blend of ultra-nationalism, economic planning, militarism, terror and incompetence, and with him a vague notion of regaining the glories of ancient Rome. He expanded the Italian navy in both surface vessels and submarines. Counter-intuitively, though, because Italy rearmed before all the other European powers, her material was obsolete first as well and she lacked the economic resources to modernize before she entered the war. The Italian military/industrial complex had some of the same economic weaknesses that the German military did, without the real ability to conquer new territories to compensate for them. These weaknesses were exacerbated by poor leadership in all branches of the military and indeed up to *Il Duce* himself.

Axis ground forces (Europe, Asia, Africa and the Pacific)			
Country	Maximum strength		
Germany	Army: 6 500 000		
	Waffen SS: 800 000		
Italy	3 700 000		
Japan	5 500 000		
Romania	600 000		

Class discussion

Hitler stood by Mussolini to the end, even having him rescued from a mountain prison. How can we account for this loyalty in light of Italy's military shortcomings?

Allied Powers

As with the Axis Powers, the legacy of the First World War deeply affected military expenditure in the inter-war period. In the 1930s, France spent nearly 50% of its budget on debt and pensions accumulated between 1914 and 1918. This meant there was less money available to rearm in the face of German rearmament. The economic and social malaise that settled on France in the 1930s fed the deeply conservative army. Tanks theory was still based on 1918 experiences. Aircraft production fell far below other European powers. Although her navy was a reasonably modern force, it was of little use against France's key rival. As much as French command had been besotted with the idea of the offensive fueled by dangerously vague notions of élan in 1914, it was defensive and statically minded in the 1930s. The most complete expression of this was the reliance on the massively expensive Maginot Line. France could muster 90 divisions of infantry. Five million were theoretically available for call up in case of war. At the outbreak of the war she had not organized her tanks into divisions, preferring instead to distribute tanks among infantry divisions as she had in 1918.

In the inter-war period, British policy turned inward, as, indeed, her voting public demanded. It was poverty and standard of living, not European stability, to which the British governments turned their attention. If she was to look abroad, it was to bolster her empire in the face of dominion independence and nationalism in the colonies. In the 1920s and 1930s she had returned to a policy of maintaining a small army. The economic crisis of the 1930s precluded anything else, even if there had been public support for rearmament. Nevertheless when

Relative war potential of the powers in 1937			
41.7%			
14.4%			
14%			
10.2%			
4.2%			
3.5%			
2.5%			

Source: Kennedy, Paul. 1988. Rise and Fall of the Great Powers: Economic Change and Military Conflict From 1500 to 2000. Fontana Press. London, UK.

🗒 Research skills

To what extent was Britain ready for war in:

- September 1938
- March 1939
- September 1939

Rate each date between 1–10, with 10 being very prepared and 1 being completely unprepared. Do the same for France and the USSR.

- 1 How did the preparedness of each country compare? What might be some reasons for the differences?
- 2 How did each country's level of readiness affect its foreign policy at these three points in time?

the war broke out the British army mustered four divisions to send to France. By May 1940 conscription had raised this number to 50 divisions. By the time the smoke of the Battle of France had settled, the British army numbered some 1.6 million men. The Royal Air Force (RAF) had 900 bombers and 600 fighters with which to defend the island. The Royal Navy was the largest in the world, although still stretched thin having to defend outposts as far away as Hong Kong and Singapore, the Mediterranean and the home islands.

Allied ground forces (Europe, Asia, Africa and the Pacific)		
Country Maximum strength		
Great Britain	3 100 000	
USA	8 200 000	
USSR	6 900 000	
France	5 900 000 (with reserves)	
Canada	730 000	
India	2 500 00	
Australia	727 000	
New Zealand	157 000	
South Africa	255 000	

Wartime production

John Keegan has argued that Germany's economic strategy mirrored its military strategy, that is to say, like the German army it was designed for quick victory. The same can be said for the Japanese economy. In fact none of the Axis economies could withstand a long war of attrition with the likes of the United States and the Soviet Union. This weakness was exacerbated by the fact that the Allied production facilities were well out of reach of Axis forces. Even the Soviet factories that lay in the path of the German onslaught were for the most part spared when they were torn down and transported out of harm's way into the Ural mountain region. This evacuation had the added benefit of moving Soviet production closer to its supply of raw materials. Germany and Japan did not enjoy any such luxury. From 1943 Germany's industrial complex was subject to day and night bombing.

Both Germany and Japan managed to maintain war production for some time in the face of these offensives. Japan moved production out of large centres and decentralized it, making targeting and concentration of firepower more difficult and ineffectual. Until 1942, the German economy had not fully committed to war production. Consumer goods were still being produced in an attempt to maintain the standard of living and women were not used to augment the industrial workforce. When Albert Speer became Minister of Armaments and War Production early in 1942, he rationalized production and centralized control of the economic system. Production began to rise, even in the face of Allied bombing. Initially its occupied territories were used to help meet the economic demands of the war, but as time went on this was far from sufficient, especially after 1944 when the size of Germany's occupied territory shrank. Thereafter war production plummeted.

Unlike their enemies, the Allies, specifically Britain, understood it would have to sacrifice consumer production for war production. About half of British production went to the war effort during the war. Despite their impressive production figures, both Britain and the USSR depended on aid from North America. The US economy produced a staggering amount of material. This included 36 billion yards of cotton cloth and 41 billion rounds of ammunition. By 1943 a liberty ship was being completed every three days.

Armaments production of the powers, 1940–1943 (billions of 1944 dollars)				
	1940	1941	1943	
Great Britain	3.5	6.5	11.1	
USSR	(5)	8.5	13.9	
United States	(1.5)	4.5	37.5	
Total of Allied combatants	3.5	19.5	62.5	
Germany	6	6	13.8	
Japan	(1)	2	4.5	
Italy	0.75	1		
Total of Axis combatants	6.75	9	18.3	

F Research and communication skills

Research the production quantities for one of the following items for each of the six major combatants in the years 1939–1945 (Germany, USSR, US, Britain, Japan and Italy):

- Aircraft
- Tanks
- Naval vessels
- Merchant vessels
- Trucks

Plot a graph depicting production quantities by year using a different colour for each country. Compare your graph with others of different items.

- 1 What patterns emerge from the graphs?
- 2 How do these patterns help explain the course of the war?



A tank is produced at a General Motors assembly line in the US



Conceptual understanding

Key questions

- → What was the significance of the ABC 1 plan for the conduct of the war?
- To what extent were the German strategy and tactics feasible given its material situation?
- To what extent did strategy contribute to the outcome of the war?
- What role did ideology play in strategic decisions for both Axis and Allied Powers?

Key concepts

- Cause
- Consequence
- → Significance

Axis Powers

As vaguely sketched out in *Mein Kampf*, Hitler sought *Lebensraum* – space in the east into which the German population could expand. This was Poland. He then turned his sights on readjusting the hated Versailles settlement in the west – again alluded to although not detailed in his autobiography. His calculation had been that the Allies would not intervene in Poland and that it could be taken quickly, leaving German forces to deal with western Europe with no enemy at her back. In other words to accomplish what the Schlieffen Plan was designed, but failed, to do in 1914 – capture France while avoiding the effects of a two-front war.

In Hitler's worldview there was to be a cataclysmic struggle between fascism and communism at some point in history and this belief formed the core of his strategic thinking, even before the fall of France. When, in the wake of France's defeat, Churchill and the British did not accept what Hitler believed to be the reality of their defeat, the German Führer had to re-evaluate. Should he postpone the conflict with the USSR and invade the British Isles? Or should he risk Napoleon's fate and turn east to settle ideological accounts with Bolshevism and secure the productive fields of western Russia and the oil of southern Russia? Regardless of ideology and supply, strengthening the German army in the east can be seen as a response to aggressive Soviet actions in the Baltic States and in Romania. True to his leadership style, Hitler did not choose, but rather let circumstances help dictate the course of events. While he had his military chiefs drafting plans for the invasion of the Soviet Union, he had his air force wage a desperate struggle to destroy the RAF in preparation for the invasion of Britain. Once they had been defeated in the skies

over Britain, the Germans devoted all their energy to the invasion of the Soviet Union.

From 1942 on, German strategy was dominated by the search for resources, particularly oil, and securing her previous conquests. Thus, Rommel's exploits in North Africa can be understood as a quest for the oil of the Middle East. When the German army swung south in Russia, it was with a view to securing the oil of the Caucasus Mountains. For the Germans 1943–1945 can be seen as a series of rearguard actions with occasional offensive thrusts, as in the case of the Battle of the Bulge in December 1944. The defensive posture that Germany had to adopt was in some ways a function of her early success or we might say overreach. German forces were forced to defend a massive front in Russia, her conquests in Greece and the Balkans. The Italian collapse added the Italian peninsula to German responsibilities. When the British, Canadian and United States armies secured their beachheads at Normandy on 6 June 1944 it added immeasurably to the defensive burden of the German forces.

German tactics, especially early in the war, were dominated by *Blitzkrieg*, so-called "Lightning War". This operational doctrine integrated precision dive-bombing – "flying artillery" – and other air support with very mobile massed armour. Offensive thrusts were to bypass enemy strong points, isolating them for later reduction. Traditional infantry would follow to secure and "mop up" any remaining resistance. *Blitzkrieg* required open spaces and a definitive and attainable end point. Both of these conditions existed in France and Poland. Both had relatively open territory through which the German tanks known as panzers could dash. The panzers pressed the Anglo-French forces against the channel. In the east the retreating Polish forces ran headlong into the Red Army. In the Soviet Union, however, only one of these conditions existed. It may have had wide, open spaces in abundance, but these spaces went on forever and would swallow the German army as it had Napoleon's.

The Allied Powers

Between January and March 1941, British, US and Canadian military planners secretly met in Washington to discuss a common strategic approach to the war. Secrecy was paramount given that the US was still neutral. US planners had already developed a contingency should they find themselves in a war with both Germany and Japan, and the ABC 1 plan followed from these strategic schemes. According to the plan:

- Italy was to be eliminated as quickly as possible
- Allied Powers would concentrate on the defeat of Germany before the defeat of Japan
- strategic bombing would become a key component of the overall strategy
- British and US holdings in the Pacific would be defended.

For the most part the broad-brush strokes of ABC 1 were realized throughout the war. The Allies did prioritize victory in Europe, which seemed all the more justified with the suspicion that the Germans were working on an atomic weapon. The North African landings and the



Lend-Lease policy

The Lend-Lease Act set up a scheme through which the US sent aid to the Allies during the Second World War. Immediate payment was not required as the US was "lending" the materials to the Allies. The programme also provided US warships (destroyers) to Britain in exchange for the lease of a number of military bases in the Caribbean. The US had Lend-Lease agreements with a number of Allied countries.

subsequent Sicily and Italian campaigns knocked Italian forces out of the war although they did not eliminate Italy as a theatre of war. The Allies may have differed on how strategic bombing was to be implemented, but they persevered through heavy losses and questionable efficacy throughout the war. The US did go on the offensive in the Pacific, but really only after their economy had been fully mobilized for war production and they had won the essentially defensive Battle of Midway.

Even before the entry of the United States in the war in December of 1941, it was clear that a key component of the Allied strategy would be to outproduce their enemy. The **Lend-Lease policy** was a part of this strategy as was the Soviet decision to dismantle over 1,500 industrial factories ahead of the German onslaught and reassemble them in the relative safety of the Ural Mountains. This strategy played a vital role in all the Allied victories, especially once the United States entered the war in December 1941. Liberty ships were produced at a rate far in excess of the German U-boats' ability to sink them. The exchange ratio during the Battle of Britain favoured the RAF. The Red Army may have lost more tanks than the Germans in the Battle of Kursk, but they could afford to do so. The Soviet Union would produce more than 54 000 tanks to Germany's 20 000. This gap was made even wider given that for much of the war Germany had to distribute this tank production over multiple fronts, while the Soviets could concentrate all their production on one front.

Tank production				
Tank	Country	Number Produced		
Sherman	USA	49 300		
T-34	USSR	57 000		
Panzer IV	Germany	8500		
Crusader	Great Britain	5400		
Tiger I and Tiger II	Germany	1850		
Churchill	Great Britain	7300		
Pershing	USA	2200		

6.4 Operations

Conceptual understanding

Key questions

- → What factors led to the early success of the Axis forces?
- To what extent did each side integrate land, air and sea power?
- To what extent did the Allies outproduce the Axis Powers?
- Why did the Allies win the war?

Key concepts

- Cause
- → Consequence
- Significance

Poland

Poland would be the first trial of *Blitzkrieg*. On the surface, Poland seemed the ideal terrain for the innovative tactics. Large, open plains allowed for unrestricted movement of large tank formations. The relative lack of cover would give the screaming Stuka dive bombers unobstructed sightlines to their targets, allowing Germany's air power to be fully integrated with its ground operations, an essential element of *Blitzkrieg*. While the topography of Poland theoretically would allow the Polish army a fairly easy path of withdrawal, after which it might regroup in the east, the secret codicils of the Molotov-Ribbentrop Pact made that prospect an illusion. The Polish army would instead be driven mercilessly east only to come up hard against the anvil of the Soviet Red Army, claiming its portion of the spoils.

Just before 5 am on 1 September 1939, the Luftwaffe launched massive air raids against Polish air force facilities, eradicating it by the end of the day. Those Polish planes which managed to get off the ground were destroyed. The air raids also targeted those infrastructure elements essential for a modern army to function: roads, rail lines and communication centres. Terror was a deliberate aspect of the air raids and as such these raids also targeted Polish cities and towns. The resulting civilian panic would clog the roads with fleeing refugees and thus hamper the operation of both civilian authorities and the Polish military.

The 1.5 million German soldiers that crossed the frontier into Poland on 1 September were divided into two army groups. One went north and then quickly east, driving behind Polish lines. The main attack would drive toward Warsaw, avoiding large Polish formations, preferring instead to get to the capital while at the same time encircling and isolating those same formations. This is, in fact what transpired. Some of