‘Make in India’ fortifies defence spending

An analysis of defence capex over the past 12 years shows a noticeable shift towards indigenisation

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An analysis of defence capital expenditure (capex) indicates increased spending during the last four or five years, along with a discernible shift towards indigenisation. Adjusted for inflation, capital allocations to the defence sector have grown at a compounded rate of around 7 per cent between the base year (2011-12) and the present (2022-23).

While rupee-denominated spending has grown at a little better than 8 per cent, imports have grown at just 1.2 per cent during this 11-fiscal year period. The allocation patterns have been uneven.

Let’s explain how we’ve examined the data. We looked for defence capital allocations, including capex scattered across several different Budget heads and demands for grants, to arrive at the annual expenditure. For example, in the 2019-20 Budget, the capital allocations for border road construction are not in the capital budget (demand No. 21), but buried in demand No. 19, which caters to the Ministry of Defence head. The allocations to the Coast Guard are similarly included in demand No. 19, even though the force operates under the Navy, which is allocated funds under demand No. 20.

Until 2016-17, capital allocations for the Defence R&D Organisation and Ordnance Factory Board were also part of the Ministry of Defence budget. These scattered capital allocations have been compiled and included in capex.

Then we split the expenditure into two separate categories: First, domestic rupee-denominated spending and, second, imports which are USD-denominated.

For six of these 12 fiscal periods (including the base year, 2011-12) defence ministry statements in Parliament gave out the ratio between domestic capex and imports. These range from 50:50 in 2018-19 to a targeted 68 per cent of domestic spending in the current fiscal with most years seeing a trend of 60 per cent of expenditure incurred domestically. Where there is no clear attribution, we’ve assumed 60 per cent of the spending was local.

The domestic capex component was adjusted for inflation, and the import component was converted to US dollars since all defence expenditure, even imports from France or Russia, are dollar-denominated. The inflation adjustment was done using the deflator, compiled from the finance ministry, Ministry of Statistics and Programme Implementation, and World Bank data. Overall, the GDP deflator indicates that inflation ran at an annualised 5.2 per cent. However, it has been over 9 per cent in 2021-22 and in the current fiscal (until August).

A deflator is a ratio of the value at current prices of all goods and services in the economy in a given year compared to the value during the base year, which is 2011-12 in this case.

For converting the rupee to dollar, the median USD-INR exchange rate prevailing during the fiscal periods concerned was used. A median is a mid-point value — in a year this would be the USD-INR value, which has 182 values above and 182 values below it. The USD strengthened from ₹48-49 in 2011-12 to over ₹81 in September 2022 with a median value of ₹78.84/USD in the current fiscal.

These approximations yield a clear picture of trends. Although the nominal allocation has grown every year, from ₹69,476 crore (2011-12) to ₹160,071 crore (2022-23 Budget Estimate), allocations have been uneven if we adjust them for inflation.

In 2012-13, and in 2021-22, the allocation was actually lower post-inflation, than in the prior fiscal. There was a whopping 20 per cent year-on-year jump in capex in 2020-21, and there has been 10 per cent increase in 2022-23. It would appear that the creation of infrastructure and the filling of gaps in the military’s arsenal after China’s incursions into eastern Ladakh in April 2020 are at least partly responsible for this capex hike.

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However, over this entire period, defence spending has grown at a CAGR of 7 per cent. It is noteworthy that defence spending has grown strongly by 9 per cent CAGR after 2016-17 even though the GDP growth has fallen since then.

The value of imports has fluctuated significantly, probably because this is “lumpy”. Defence imports are paid for in the year in which they are delivered, apart from a signing advance of 10-15 per cent of the contract value.

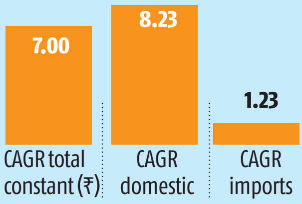
There could be a capex spike in a year where a large contract is signed (through payment of the advance) or when a larger-than-normal delivery takes place (such as a full squadron of aircraft, or a brigade of tanks). There have been years such as 2018-19 and 2019-20 when imports climbed 26.5 per cent YoY to $7.7 billion in 2018-19 and then dropped by 16 per cent to $6.5 billion in 2019-20. In each such case, there is a larger-than-normal delivery — for example, the Rafale (imports) or Tejas fighters (domestic), or the Russian S400 air defence system — to explain the bounce.

In the base year, 2011-12, India imported $5.7 billion worth of defence equipment. In 2022-23, it intends to import $.6.5 billion, which is a CAGR of just 1.2 per cent. But imports hit $7.8 billion in 2021-22, and $7.6 billion in 2020-21. It does appear that the efforts to indigenise are slowly making an impact.

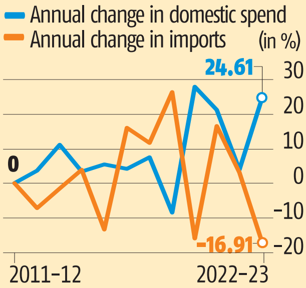
This could also be due to accelerated construction of communication infrastructure along the northern, Himalayan borders during the past few years. This means that part of the domestic capex has been allocated towards roads, barracks, etc., which necessitate the use of locally sourced cement and steel and other construction materials rather than expensive imported weapons and sensor equipment.

THE MONEY ARSENAL

GROWTH MAP



ANNUAL VARIATIONS



	DOMESTIC CAPEX (ASSUMED AT 60% IF NOT KNOWN)					IMPORTS IN $BN (ASSUMED AT 40% IF NOT KNOWN)			
Financial Year	Current capex (₹ cr)	Current domestic spend (₹cr)	Implied inflation deflator Y-o-Y (%)	Domestic capex (in constant ₹cr, '11-12)	Annual change in domestic spend (%)	Forex spending (₹cr)	Median USD INR exchange rate (₹/$)	Forex spending ($bn)	Annual change in import (%)
2011-12	69,476	41,686	8.54	41,686		27,790	48.91	5.68	
2012-13	72,063	43,238	7.93	40,061	3.72	28,825	54.57	5.28	-7.02
2013-14	80,195	48,117	6.19	45,313	11.28	32,078	61.53	5.21	-1.31
2014-15	83,022	49,813	3.31	48,219	3.53	33,209	61.25	5.42	4.00
2015-16	83,560	52,643	2.28	51,469	5.68	30,917	65.74	4.70	-13.27
2016-17	91,483	54,890	3.30	53,135	4.27	36,593	66.97	5.46	16.19
2017-18	98,473	59,084	3.92	56,857	7.64	39,389	64.44	6.11	11.86
2018-19	108,133	54,067	3.77	52,103	-8.49	54,067	69.92	7.73	26.52
2019-20	115,350	69,210	3.56	66,832	28.01	46,140	71.02	6.50	-15.99
2020-21	139,982	83,989	4.58	80,310	21.35	55,993	73.89	7.58	16.64
2021-22	145,588	87,353	9.58	79,714	4.00	58,235	74.47	7.82	3.19
2022-23	160,071	108,848	9.44	99,459	24.61	51,223	78.84	6.50	-16.91

Note: Base year 2011-12; deflator: April–Aug 2022; capex budgetary estimate for 2022-2; Rest Revised/Final Estimates