

PRINCIPLES OF FINANCIAL MANAGEMENT

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THE F-I-O MODEL

FINANCING

- RAISING FUNDS FOR THE BUSINESS

INVESTMENT

- ACQUIRING ASSETS TO GENERATE INCOME

OPERATING

- USING THE ASSETS TO GENERATE INCOME

THE F-I-O MODEL

FINANCING

- RAISING FUNDS FOR PUBLIC SERVICE DELIVERY

INVESTMENT

- ACQUIRING ASSETS TO GENERATE PUBLIC SERVICE

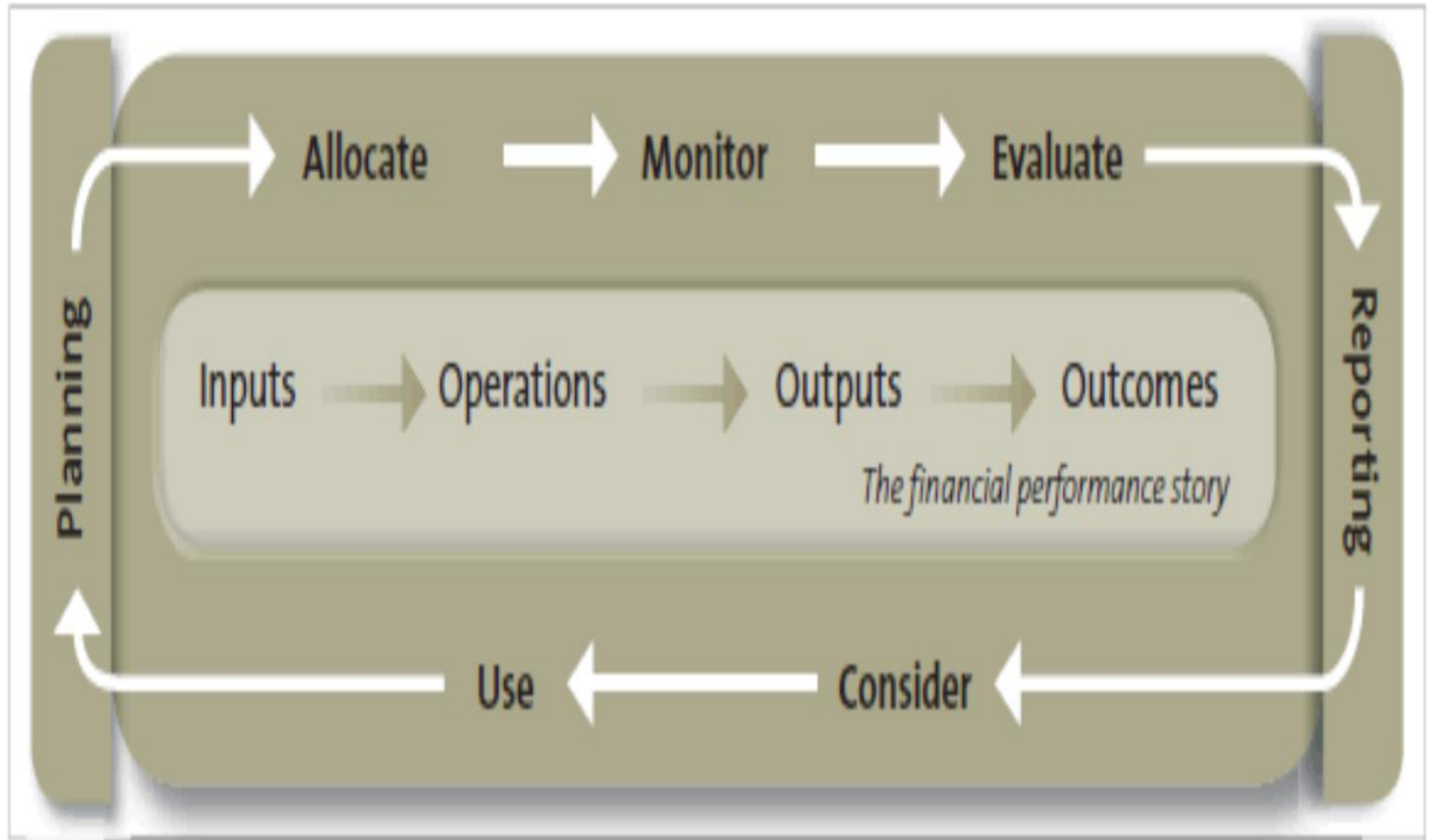
OPERATING

- USING THE ASSETS TO DELIVER PUBLIC SERVICE

OBJECTIVES OF FINANCIAL MANAGEMENT

- ✘ Effective Utilisation of Resources
- ✘ Maximise the Value Generated from the Expenditure
- ✘ Achieve more with less

FINANCIAL MANAGEMENT





PRINCIPLES THAT FORM THE FOUNDATIONS OF FINANCIAL MANAGEMENT

“...although it is not necessary to understand finance in order to understand these principles, it is necessary to understand these principles in order to understand finance.”

PRINCIPLE 1: THE RISK-RETURN TRADE-OFF

- ✘ Additional risk will be taken only if it is expected to be compensated with additional return.
- ✘ Investment alternatives have different amounts of risk and expected returns.
- ✘ The more risk an investment has, the higher its expected return will be.

PRINCIPLE 2: THE TIME VALUE OF MONEY

- ✘ A rupee received today is worth more than a rupee received in the future.
- ✘ Because we can earn interest on money received today, it is better to receive money earlier rather than later.

PRINCIPLE 3: CASH—NOT PROFITS— IS KING

- ✘ Cash Flow, not accounting profit, is used as our measurement tool.
- ✘ Cash flows, not profits, are actually received by the firm and can be reinvested.

PRINCIPLE 4: INCREMENTAL CASH FLOWS

- ✘ It is only what changes that counts
- ✘ The incremental cash flow is the difference between the projected cash flows if the project is selected, versus what they will be, if the project is not selected.

PRINCIPLE 5: THE CURSE OF COMPETITIVE MARKETS

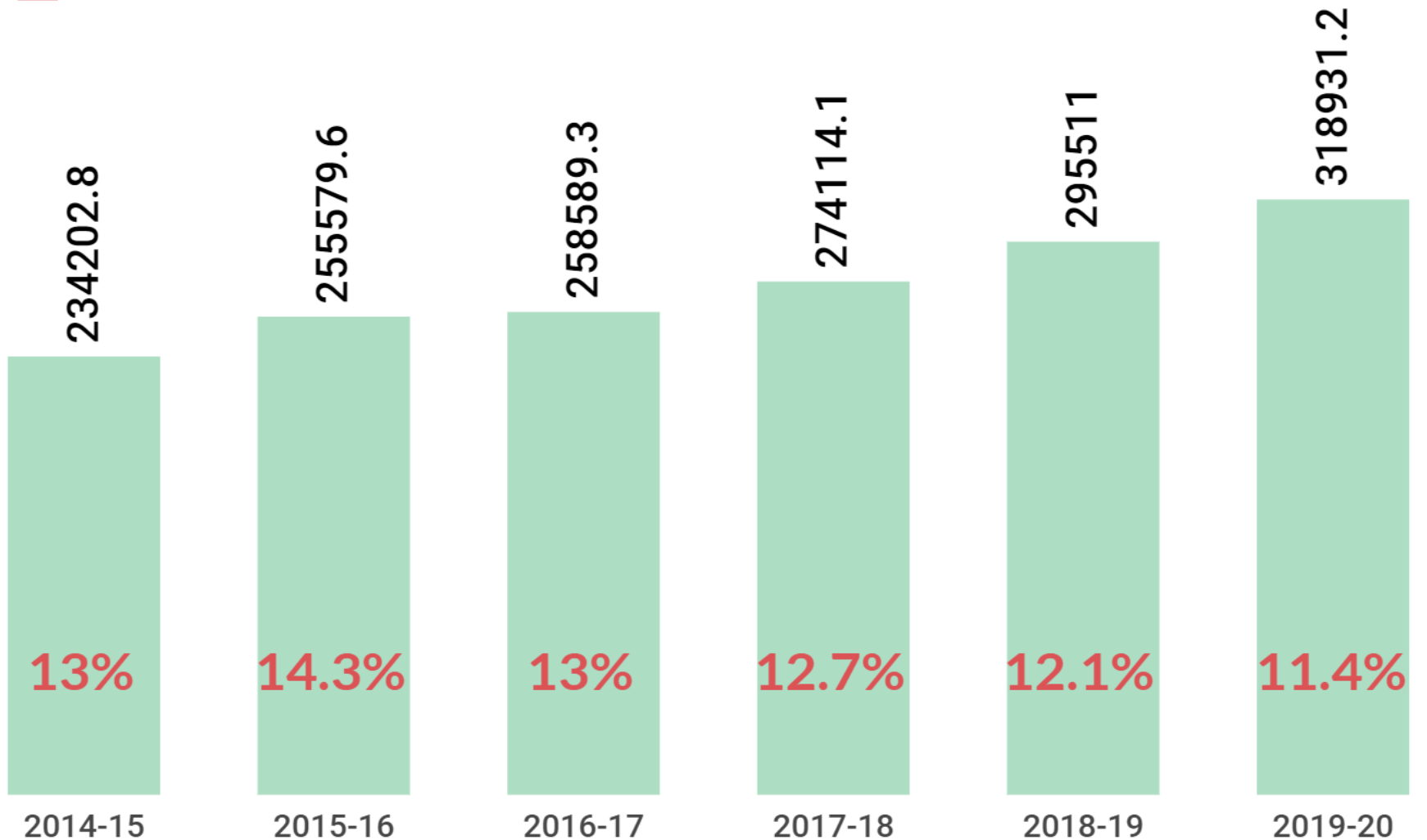
- ✘ It is hard to find exceptionally profitable projects
- ✘ If an industry is generating large profits, new entrants are usually attracted. The additional competition and added capacity can result in profits being driven down to the required rate of return.
 - + Product Differentiation, Service and Quality can insulate products from competition

PRINCIPLE 6: ETHICAL BEHAVIOR IS DOING THE RIGHT THING, AND ETHICAL DILEMMAS ARE EVERYWHERE IN FINANCE

- ✘ Each person has his or her own set of values, which forms the basis for personal judgments about what is the right thing

DEFENCE BUDGET AS COMPARED TO TOTAL BUDGET

■ Percentage share of the total budget



MoD's Expenditure: Civil and Defence

Year	Civil Expenditure (Rs in Crore)		Defence Expenditure (Rs in Crore)	MoD's Expenditure (Rs in Crore)	Defence Pension as % of MoD Expenditure
	Pension	MoD (Misc.)			
	1	2	3	4 (1+2+3)	5 (1/4*100)
2015-16	60238	32267	201415	293920	20
2016-17	87826	15014	248710	351550	25
2017-18	92000	15145	272560	379704	24
2018-19 (BE)	108853	16206	279305	404364	27
2018-19 (RE)	106775	16318	282100	405194	26
2019-20 (BE)	112080	17065	301866	431011	26

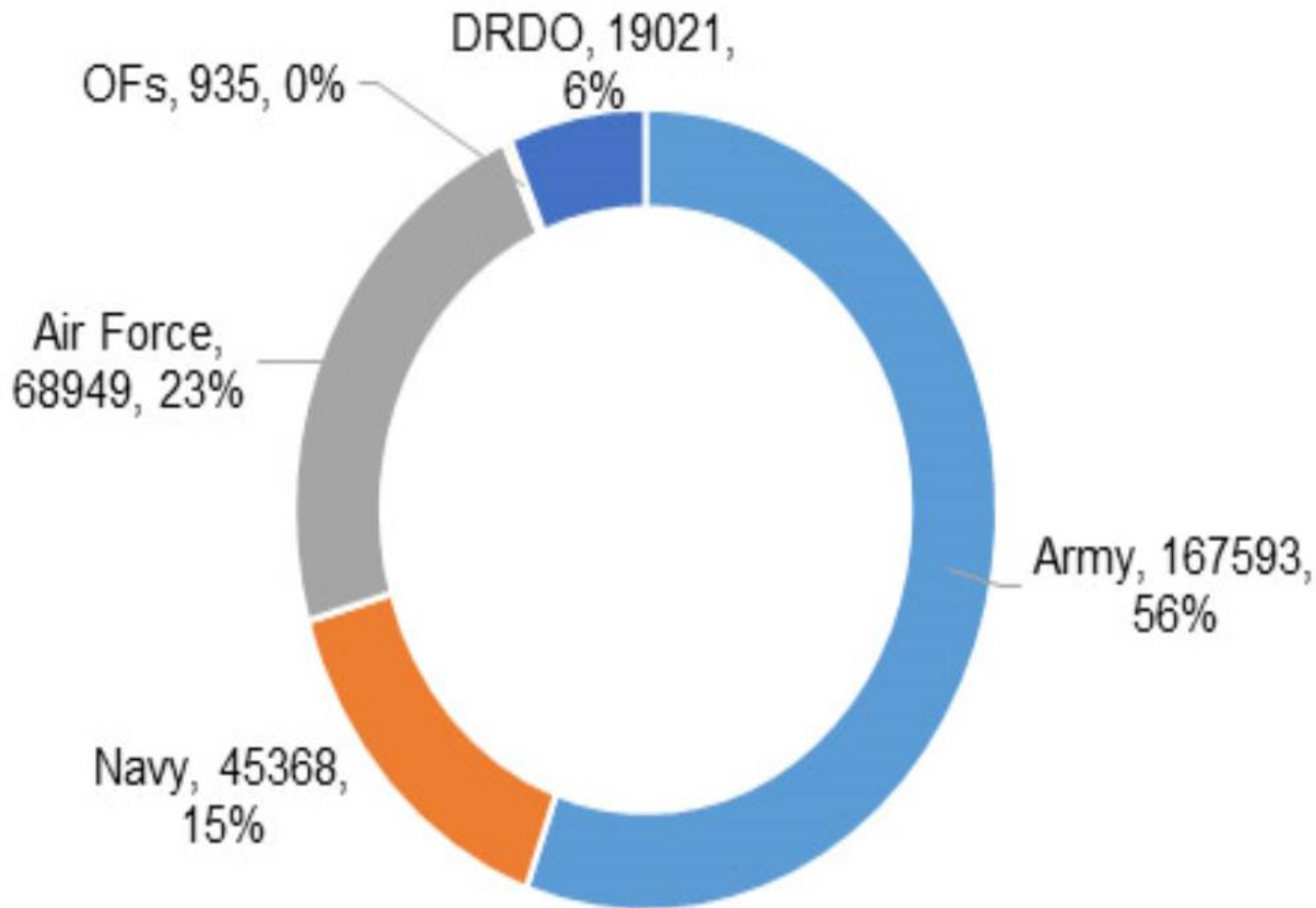
Note: MoD (Miscellaneous) includes MoD Secretariat, Defence Accounts Department, Canteen Stores Department, Defence Estates Organization, Coast Guard Organisation, JAKLI, Border Roads Organisation, Military Firms and Ex-Servicemen Health Scheme, etc.;

(Discretionary Budget Authority) + OCO + Emergency ◆	FY2019 ◆
Military Personnel	\$152,883,052
Operations and Maintenance	\$283,544,068
Procurement	\$144,340,905
RDT&E	\$92,364,681
Revolving and Management Funds	\$1,557,305
Defense Bill	\$674,690,011
Military Construction	\$9,801,405
Family Housing	\$1,582,632
Military Construction Bill	\$11,384,037
<u>Total Base + OCO + Emergency.</u>	<u>\$686,074,048</u>

Defence Allocations 2018-19 and 2019-20

	Revenue Expenditure	Capital Expenditure	Total
2018-19 (BE) (Rs in Crore)	185323	93982	279305
2018-19 (RE) (Rs in Crore)	188118	93982	282100
2019-20 (BE) (Rs in Crore)	198486	103380	301866
% Growth in 2019-20 (BE) over 2018-19 (RE)	6	10	7
% Growth in 2019-20 (BE) over 2018-19 (BE)	7	10	8

SHARE OF DEFENCE SERVICES IN INTERIM DEFENCE BUDGET 2019-20



Note: Army includes Directorate General Quality Assurance (DGQA)

Revenue and Capital Expenditure of Armed Forces, 2019-20 (Interim)

Rs in crores	Army	Navy	Air Force
Revenue Expenditure	138,085	22,212	29,602
Capital Expenditure	29,508*	23,156	39,347
Total (Revenue and Capital)	167,593	45,368	68,949
Revenue Expenditure as % of Total	82	49	43
Capital Expenditure as % of Total	18	51	57

Note: *: Includes Rs 10.96 crore for capital expenditure of DGQA

Modernisation Budget of the Armed Forces

	2018-19 (BE)	2018-19 (RE)	2019-20 (BE)	% Increase in 2019-20(BE) over 2018-19 (BE)
Army*	21211	21166	22951	8.2
Navy	19927	20035	22106	10.9
Air Force	33085	33100	36365	9.9
Total	74224	74301	81422	9.7

Note: *: Figures for Army are approximate

Shortfall in Capital Acquisition, 2018-19

		Rs in crores		
Service	Projection	Allocation	Shortfall	Shortfall (%)
Army	37122	21338	15783	43
Navy	30358	19083	11275	37
Air Force	72482	33100	39382	54
Total	139962	73521	66440	47

Army's Modernisation Budget*

Modernisation Head	2018-19 (BE)	2018-19 (RE)	2019-20 (BE)	% Increase in 2019-20(BE) over 2018-19(BE)
Aircraft & Aero-Engine	1813	2369	2115	16.7
H&MV	1972	1732	2128	7.9
Other Equipment	17198	16993	18562	7.9
Rolling Stock	128	2	50	-61
Rashtriya Rifles	100	70	95	-4.7

Note: *: Figures for Army are approximate

Navy's Modernisation Budget

Modernisation Head	2018-19 (BE)	2018-19 (RE)	2019-20 (BE)	% Increase in 2019-20 (BE) over 2018-19 (BE)
Aircraft & Aero-Engine	1900	1900	2400	26.3
H&MV	20	60	45	125
Other Equipment	4863	3470	3500	-28
Joint Staff	844	887	929	10
Naval Fleet	10300	11313	12182	18.3
Naval Dockyard/Projects	2000	2405	3050	52.5

Air Force's Modernisation Budget

Modernisation Head	2018-19 (BE)	2018-19 (RE)	2019-20 (BE)	% Increase in 2019-20 (BE) over 2018-19 (BE)
Aircraft & Aero-Engine	24709	24812	24807	0.4
H&MV	202	66	110	-45.6
Other Equipment	8174	8223	11448	40.1

MoD's Expenditure: Civil and Defence

Year	Civil Expenditure (Rs in Crore)		Defence Expenditure (Rs in Crore)	MoD's Expenditure (Rs in Crore)	Defence Pension as % of MoD Expenditure
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Key Defence Statistics, 2018-19 and 2019-20

Parameter	2018-19	2019-20
Defence Budget (Rs in Crore)	2,79,305	3,01,866
Growth of Defence Budget (%)	7.7	8.1
Share of Defence Budget in GDP (%)	1.48	1.44
Share of Defence Budget in Central Government Expenditure (%)	11.4	10.8
Defence Pension (Rs in Crore)	1,08,853	1,12,080
Growth of Defence Pension (%)	27	3
MoD's Budget (Rs in Crore)	4,04,365	4,31,011
Growth in MoD's Budget (%)	12.4	6.6
Share of MoD Budget in GDP (%)	2.2	2.1
Share of MoD Budget in Central Government Expenditure (%)	16.6	15.5

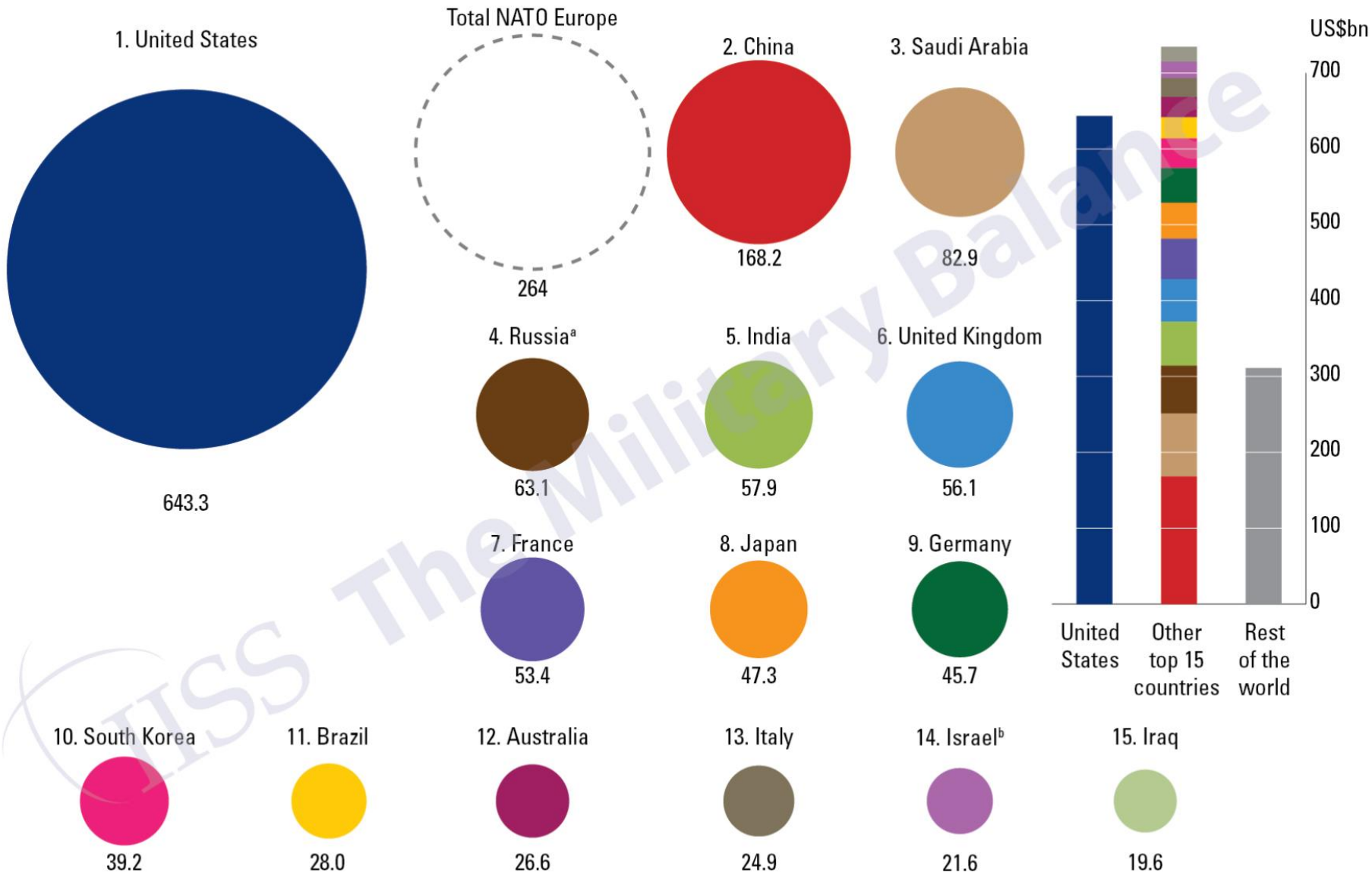
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Key Defence Statistics, 2018-19 and 2019-20

Parameter	2018-19	2019-20
Defence Budget (Rs in Crore)	2,79,305	3,01,866
Revenue Expenditure (Rs in Crore)	1,85,323	1,98,486
Growth of Revenue Expenditure (%)	7.3	7.1
Share of Revenue Expenditure in Defence Budget (%)	66	66
Capital Expenditure (Rs in Crore)	93,982	1,03,380
Growth of Capital Expenditure (%)	8.7	10
Share of Capital Expenditure in Defence Budget (%)	34	34
Share of Capital Expenditure in Central Government Capital Expenditure (%) #	31	31
Capital Acquisition (Rs in Crore)	74,116	81,422*
Growth of Capital Acquisition (%)	6.7	9.9*

Note: *: Approximate estimates; #: The share is with respect to the capital segment of the defence budget. If the MoD's total capital expenditure is taken into accounts, the share increases to 32.2 per cent in 2019-20.



Top defence budgets, 2018 (US\$bn), including total European NATO spending






^a Under NATO defence-spending definition; ^b Includes US Foreign Military Assistance



Note: US dollar totals are calculated using average market exchange rates for 2018, derived using IMF data. The relative position of countries will vary not only as a result of actual adjustments in defence spending levels, but also due to exchange-rate fluctuations between domestic currencies and the US dollar. The use of average exchange rates reduces these fluctuations, but the effects of such movements can be significant in a number of cases.



GLOBAL FIREPOWER INDEX



 United States 
1 PwrIndx: 0.0615



 Russia 
2 PwrIndx: 0.0639



 China 
3 PwrIndx: 0.0673



 India 
4 PwrIndx: 0.1065

 France 
5 PwrIndx: 0.1584


 Japan 
6 PwrIndx: 0.1707



 South Korea 
7 PwrIndx: 0.1761

 United Kingdom 
8 PwrIndx: 0.1797

 Turkey 
9 PwrIndx: 0.2089

 Germany 
10 PwrIndx: 0.2097

 Italy 
11 PwrIndx: 0.2277

 Egypt 
12 PwrIndx: 0.2283

SOMETHING TO REMEMBER

Cost minimisation is a sign of management success. Cost cutting is a sign of management failure.

IDENTIFYING DRIVERS

ACTIVITY DRIVER

A measure of the frequency & intensity of the demands placed on activities by cost objects



Drivers

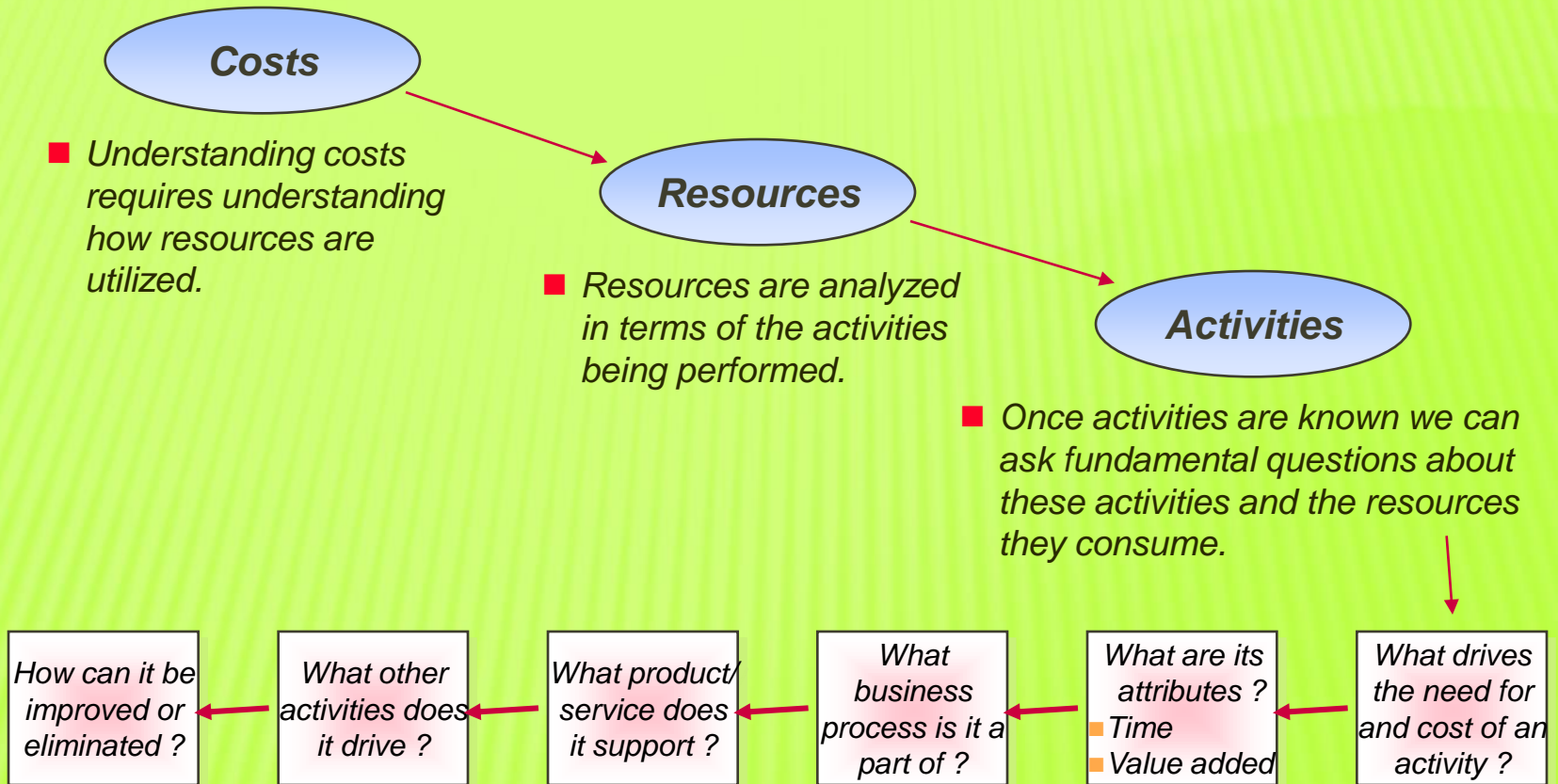
COST DRIVER

Any factor that causes a change in the cost of an activity

RESOURCE DRIVER

A measure of the quantity of resources consumed by an activity

ACTIVITIES ARE LINKED TO THE RESOURCES THEY USE



Answering these questions is the key to effective decision making.

VALUE ADDED TIME

VAT comes from the processing time and includes cost of direct materials and conversion costs.



VALUE-ADDED VERSUS NONVALUE-ADDED ACTIVITIES

- ✘ **Value-added activities** increase the worth of a product or service to customers.
- ✘ They involve resource usage and related costs that customers are willing to pay for.
- ✘ Value-added activities are the functions of actually manufacturing a product or service.
- ✘ Examples include engineering design, machining, assembly, painting, and packaging.

VALUE-ADDED VERSUS NONVALUE-ADDED ACTIVITIES

- × **Nonvalue-added activities** are production- or service-related activities that add cost to, or increase the time spent on, a product or service without increasing its market value.
- × Examples include the repair of machines, storage of inventory, moving of materials, maintenance and inspections.

EXAMPLES

Value Added

Strategic

- Capital Investment
- New Product Development
- Training
- Process Improvement
- Marketing

VA

- Material
- Labour
- Process cost
- Advertising

Non-Value Added

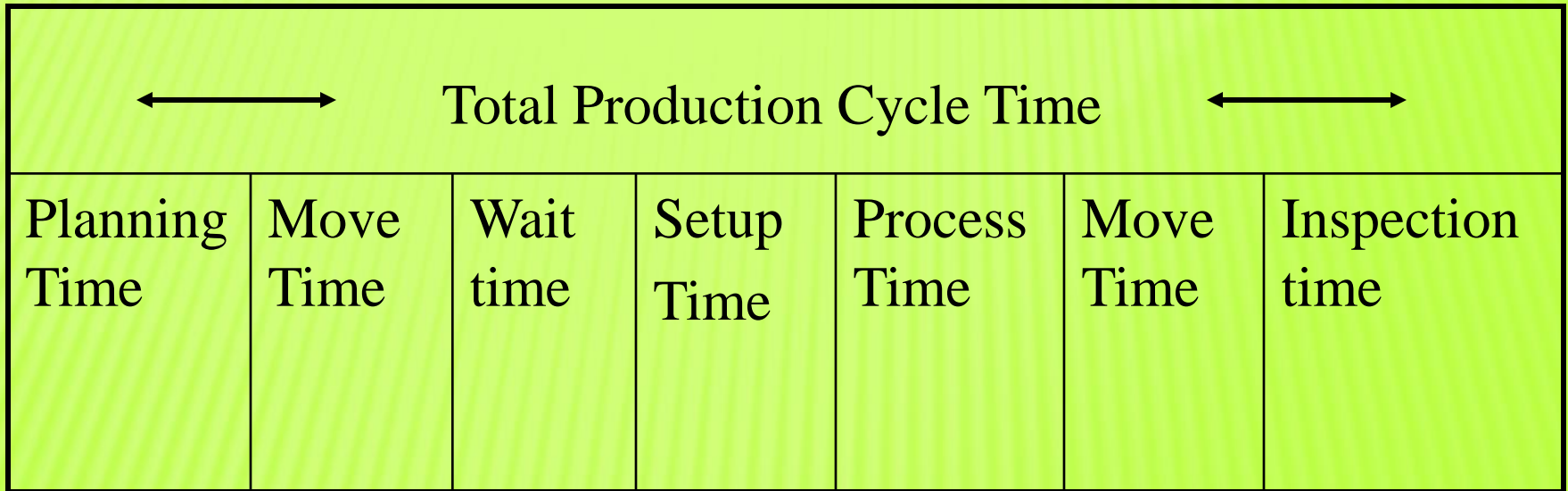
Support

- Quality Assurance
- Purchasing
- Logistics
- Statutory Requirements

NVA

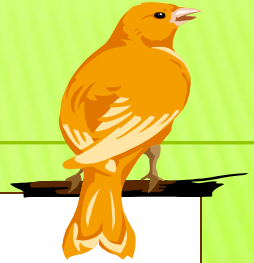
- Inspection
- Material Handling
- Rework and Scrap
- Expediting Inefficiencies

VALUE-ADDED ANALYSIS



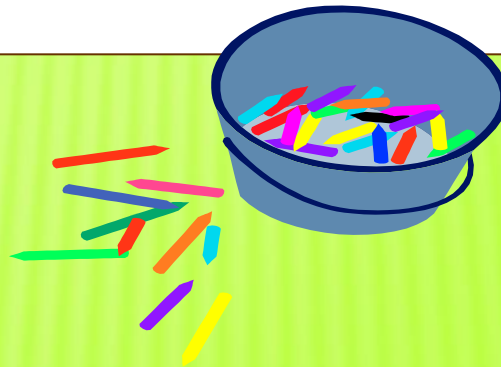
Only the Process Time is Value-Added

WAT



WAT consists of Set-up time (**SUT**), Inspection time (**IT**), Movement time (**MT**), Waiting time for the warehouse (**WT**), Storage time until sale (**ST**), which includes warehouse and distribution costs and other waste added cost (**OT**) denominated time like rebates, discounts, special deals or zero percent finance and sale returns.

Often Collection time
(CT) is also included in
the WAT.



WAT

WAT (= SUT + IT + MT + WT + ST + OT + CT) has to be minimized without unduly destabilizing the business, scale and scope.

Three Key Questions

- 1. Can an activity be performed differently or even eliminated?**
- 2. Can a group of linked value activities be regrouped ?**
- 3. Can collaborations with other firms lower or eliminate activities and costs?**

ACTIVITY ANALYSIS

- Activities drive costs but focus of cost control is cost occurrence not the drivers of cost.
- Activities complement continuous improvement, by identifying value adding vs non value adding activities
- Activities facilitate evaluation of alternatives. Process reengineering efforts are supported by the activity analysis to choose the cost effective alternatives.
- Activity analysis help focus on corporate strategy, such as new product development, brand building, etc. create activities which are evaluated through activity analysis.
- Activities link planning and control at an actionable level
- Activities integrate financial and non-financial performance measures.