# GROSS DOMESTC PRODUCT(GDP)-AN OVERVIEW

- 8.1 Domestic product is an indicator of overall production activity. GDP is a measure of production. The level of production is important because it largely determines how much a country can afford to consume and it also affects the level of employment. The consumption of goods and services, both individually and collectively, is one of the most important factors influencing the welfare of a community. The concept of GDP in the 1993 SNA framework has been briefly discussed in the following paragraphs.
- 8.2 It should be noted, however, that GDP is not intended to measure the production taking place within the geographical boundary of economic territory. Some of the the production of a resident producer may take place abroad, while some of the production taking place within the geographical boundary of the economy may be carried out non-resident producer units. For bv example, a resident producer may have teams of employees working abroad temporarily on the installation, repair or servicing of equipment. This output is an export of a resident producer and the productive activity does not contribute to the GDP of the country in which it takes places. Thus, the distinction between resident and non-resident institutional units is crucial to the definition and coverage of GDP. In practice, of course, most of the productive activity of resident producers takes place within the country in which they are resident. However, producers in service industries which typically have to deliver their outputs directly to their clients wherever they are located are increasingly tending to engage in production in more than one country, a practice which is encouraged by rapid transportation and instantaneous communication facilities. There are three equivalent approaches to measure the GDP, namely the production, income, and expenditure. The production approach GDP measures the sum of value added of all economic activities within the country's territory (sum of output minus intermediate consumption) plus indirect taxes minus subsidies on products. The expenditure approach GDP depicts the final use (demand) of the output and comprises Government Final Consumption (i) Expenditure (GFCE) (ii) Private Final Consumption Expenditure (PFCE) (iii) Gross Fixed Capital Formation (GFCF), (iv) Change in Stocks (CIS), and (v) Net Export of Goods & Services. The income (value added)

generated through the production activity is distributed between the two factors of production, namely, labour and capital, which receive respectively the salaries and the operating surplus/mixed income of self employed. Thus the income approach GDP is the sum of compensation of employees, gross operating surplus and gross mixed income plus taxes net of subsidies on production. In the National Accounts Statistics of India, the production approach GDP is considered firmer estimate; and the NAS presents the discrepancy with the expenditure approach GDP explicitly.

### Production approach GDP

- 8.3 GDP is a concept of value added. It is the sum of gross value added of all resident producer units (institutional sectors, or industries) plus that part (possibly the total) of taxes, less subsidies, on products which is not included in the valuation of output. Gross value added is the difference between output and intermediate consumption.
- 8.4 The underlying rationale behind the concept of GDP for the economy as a whole is that it should measure the total gross values added produced by all institutional units resident in the economy. However, while the concept of GDP is based on this principle, GDP as defined in the System may include not only the sum of the gross values added of all resident producers but also various taxes on products, depending upon the precise ways in which *outputs, inputs and imports* are valued.
- 8.5 Output: Output is a concept that applies to a an establishment producer unitor enterprise-rather than a process of production. Output has to be defined in the context of a production account (refer to Table 1, Appendix 5.1), and production accounts are compiled for establishments or enterprises, and not for processes of production. Output therefore consists only of those goods and services; that are produced within an establishment that becomes available for use outside that establishment. When an enterprise contains more than one establishment, the output of the enterprise is the sum of the outputs of its component establishments.
- 8.6 The output of most goods or services in majority of the cases is recorded when their production is completed. However, when it takes a long time to produce a unit of output, it becomes necessary to recognize

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that output is being produced continuously and to record it as "work-in-progress". For production example, the of certain agricultural goods or large durable goods such as ships or buildings may take months or years to complete. In such cases, it would distort economic reality to treat the output as if it were all produced at the moment of time when the process of production happens to terminate. In any case, whenever a process of production, however long or short, extends over two or more accounting periods, it is necessary to calculate the work-in-progress completed within each of the periods in order to be able to measure how much output is produced in each period.

- 8.7 Goods or services produced as outputs may be used in several different ways. Apart from certain service producers, such as financial intermediaries and wholesale and retail traders whose outputs have special characteristics, goods or services produced as outputs must be disposed of by their owners in one or more of the following ways during the period in which they are produced. Output may:
  - be sold: only goods or services sold at economically significant prices are included here;
  - be bartered in exchange for other goods, services or assets, provided to their employees as compensation in kind, or used for other payments in kind;
  - enter the producer's inventories prior to their eventual sale, barter or other use: incomplete outputs enter the producer's inventories in the form of additions to work-in-progress;
  - be supplied to another establishment belonging to the same enterprise for use, as intermediate inputs into the later's production;
  - be retained by their owners for own final consumption or own gross fixed capital formation;
  - be supplied free, or sold at prices that are not economically significant, to other institutional units, either individually or collectively.
- 8.8 A fundamental distinction is drawn between market output, output produced for own final use and other non-market output.
- 8.9 Market output (P.11): Market output is output that is sold at prices that are economically significant or otherwise disposed of on the market, or intended for sale or disposal on the market. Prices are said to be economically significant when they have a significant influence on the

amounts the producers are willing to supply and on the amounts purchasers wish to buy. Apart from certain service industries for which special conventions are adopted, the value of the market output of a producer is given by the sum of the values of the following items for the period in question:

- (a) The total value of goods and services sold (at economically significant prices);
- (b) The total value of goods or services bartered;
- (c) The total value of goods or services used for payments in kind, including compensation in kind;
- (d) The total value of goods or services supplied by one establishment to another belonging to the same market enterprise to be used as intermediate inputs;
- (e) The total value of changes in inventories of finished goods and work-in-progress intended for one or other of the above uses.
- Output produced for own final use (P.12): 8.10 Such output consists of goods or services that are retained for their own final use by the owners of the enterprises in which they are produced. As corporations have no final consumption, output for own final consumption produced only is by unincorporated enterprises: for example, agricultural goods produced and consumed by members of the same household. The output of domestic and personal services produced for own consumption within households is not included, although housing services produced for own consumption by owner-occupiers and services produced on own account by employing paid domestic staff are included under this heading.
- 8.11 Goods or services used for own gross fixed capital formation can be produced by any kind of enterprise, whether corporate or unincorporated. They include, for example, the special machine tools produced for their own use by engineering enterprises, or dwellings, or extensions to dwellings, produced by households. A wide range of construction activities may be undertaken for the purpose of own gross fixed capital formation in rural areas, including communal construction activities undertaken by groups of households.
- 8.12 The value of output produced for own final use is given by the sum of the values of the following items for the period in question:
  - (a) The total value of goods and services produced by household enterprises and consumed by the same households;

- (b) The total value of the fixed assets produced by an establishment that are retained within the same enterprise for use in future production (own-account gross fixed capital formation);
- (c) The total value of changes in inventories of finished goods and work-in-progress intended for one or other of the above uses.
- 8.13 Additions to work-in-progress on structures intended for own use are treated as acquisitions of fixed assets by their producers. They are therefore recorded under (b) instead of (c) above.
- 8.14 Other non-market output (P.13): It consists of goods and individual or collective services produced by non-profit institutions serving households (NPISHs) or government that are supplied free, or at prices that are not economically significant, to other institutional units or the community as a whole. Such output may be produced for two reasons:
  - (a) It may be technically impossible to make individuals pay for collective services because their consumption cannot be monitored or controlled. The pricing mechanism cannot be used when transactions costs are too high and there is market failure. The production of such services has to be organized collectively by government units and financed out of funds other than receipts from sales, namely taxation or other government incomes;
  - (b) Government units and NPISHs may also produce and supply goods or services to individual households for which they could charge but choose not to do so as a matter of social or economic policy. The most common examples are the provision of education or health services, free or at prices that are not economically significant, although other kinds of goods and services may also be supplied.
- 8.15 A price is said to be not economically significant when it has little or no influence on how much the producer is prepared to supply and is expected to have only a marginal influence on the quantities demanded. It is thus a price that is not quantitatively significant from the point of view of either supply or demand. Such prices are likely to be charged in order to raise some revenue or achieve some reduction in the excess demand that may occur when services are provided completely

free, but they are not intended to eliminate such excess demand. Once a decision has been taken on administrative, social or political grounds about the total amount of a particular non-market good or service to be supplied, its price is deliberately fixed well below the equilibrium price that would clear the market. The difference between a price that is not economically significant and a zero price is, therefore, a matter of degree. The price merely deters those units whose demands are the least pressing without greatly reducing the total level of demand.

8.16 The value of the non-market output of a producer (other than output produced for own final use) is given by the sum of the values of the following items for the period in question:

> (a) The total value of goods and services supplied free, or at prices that are not economically significant, to other institutional units, either individually or collectively;

> (b) The total value of goods or services supplied by one establishment to another belonging to the same non-market producer to be used as intermediate inputs;

> (c) The total value of changes in inventories of finished goods and work-in-progress intended for one or another of the above uses.

- As prices that are not economically 8.17 significant may reflect neither relative production costs nor relative consumer preferences, they do not provide a suitable basis for valuing the outputs of goods or services concerned. The non-market output of goods or services sold at these prices is, therefore, valued in the same way as goods or services provided free, i.e., by their costs of production. Part of this output is purchased by households, the remainder constituting final consumption expenditures by government units or NPISHs.
- 8.18 Intermediate consumption (P.2): In the accounts, svstem of national the intermediate inputs are recorded and valued at the time they enter the production process, while outputs are recorded and valued as they emerge from the process. Intermediate inputs are normally valued at purchaser's prices and outputs at basic prices, or alternatively at producer's prices if basic prices are not available. The increase between the value of the intermediate inputs and the value of the outputs is the gross →

value added against which the consumption of fixed capital, taxes on production(less subsidies) and compensation of employees must be charged. The positive or negative balance remaining is the net operating surplus or mixed income. The definition, measurement and valuation of outputs and inputs are, therefore, fundamental to the system. Intermediate consumption consists of the value of the goods and services consumed as inputs by a process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital. The goods or services may be either transformed or used up by the production process. Some inputs re-emerge after having been transformed and incorporated into the outputs; for example, grain may be transformed into flour which in turn may be transformed into bread. Other inputs are completely consumed or used up; for example, electricity and most services.

- 8.19 Intermediate consumption does not include expenditures by enterprises on valuables consisting of works of art, precious metals stones and articles of jewellery and fashioned out of them. Valuables are assets acquired as stores of value: they are not used up in production and do not deteriorate physically over time. Expenditures on valuables are recorded in the capital account. Intermediate consumption also does not include costs incurred by the gradual using up of fixed assets owned by the enterprise: the decline in their value during the accounting period is recorded as consumption of fixed capital. However, intermediate consumption does include the rentals paid on the use of fixed assets, whether equipment or buildings, that are leased from other institutional units, and also fees, commissions, royalties, etc., payable under licensing arrangements.
- 8.20 Intermediate consumption includes the value of all the goods or services used as inputs into ancillary activities such as purchasing, marketing, sales, accounting, data processing, transportation, storage, maintenance, security, etc. The goods and services consumed by these ancillary activities are not distinguished from those consumed by the principal (or secondary) activities of a producing establishment even though the levels at which ancillary activities are carried out do not usually vary proportionately with the level of the principal activity.
- 8.21 The intermediate consumption of a good or service is recorded at the time when the good or service enters the process of

production, as distinct from the time it was acquired by the producer. In practice, the two times coincide for inputs of services, but not for goods, which may be acquired some time in advance of their use in production. A good or service consumed as an intermediate input is normally valued at the purchaser's price prevailing at the time it enters the process of production; that is, at the price the producer would have to pay to replace it at the time it is used.

- 8.22 In practice, establishments do not usually record the actual use of goods in production directly. Instead, they keep records of purchases of materials and supplies intended to be used as inputs and also of any changes in the amounts of such goods held in inventory. An estimate of intermediate consumption during a given accounting period can then be derived by subtracting the value of changes in inventories of materials and supplies from the value of purchases made. Changes in inventories of materials and supplies are equal to entries less withdrawals and recurrent losses on goods held in inventory.
- 8.23 When goods or services produced within the same establishment are fed back as inputs into the production within the same establishment, they are not recorded as part of the intermediate consumption or the output of that establishment. On the other hand, deliveries of goods and services between different establishments belonging to the same enterprise are recorded as outputs by the producing establishments and must, therefore, be recorded as intermediate inputs by the receiving establishments.
- 8.24 The following types of goods and services provided to employees must be treated as part of intermediate consumption:
  - (a) Tools or equipment used exclusively, or mainly, at work;
  - (b) Clothing or footwear of a kind which ordinary consumers do not choose to purchase or wear and which are worn exclusively, or mainly, at work; e.g., protective clothing, overalls or uniforms. However, uniforms or other special clothing which employees choose to wear extensively off-duty instead of ordinary clothing should be treated as remuneration in kind;
  - (c) Accommodation services at the place of work of a kind which cannot be used by the households to which the employees

→ 86

belong - barracks, cabins, dormitories, huts, etc.;

- (d) Special meals or drinks necessitated by exceptional working conditions, or meals or drinks provided to servicemen or others while on active duty;
- (e) Transportation and hotel services provided while the employee is traveling on business;
- (f) Changing facilities, washrooms, showers, baths, etc. necessitated by the nature of the work;
- (g) First aid facilities, medical examinations or other health checks required because of the nature of the work.
- 8.25 Employees may sometimes be responsible for purchasing the kinds of goods or services listed above and be subsequently reimbursed in cash by the employer. Such cash reimbursements must be treated as intermediate expenditures by the employer and not as part of the employee's wages and salaries. The provision of other kinds of goods and services, such as meals, ordinary housing services, the services of vehicles or durable consumer goods used other extensively away from work, transportation to and from work, etc. should be treated as remuneration in kind.
- 8.26 Valuation of output, Intermediate Consumption and Value Added: More than one set of prices may be used to value outputs and inputs depending upon how taxes and subsidies on products, and also transport charges, are recorded. Moreover, value added taxes, (VAT), and similar deductible taxes may also be recorded in more than one way.
- 8.27 Basic and producers' prices: The System utilizes two kinds of output prices, namely, basic prices and producers' prices:

(a) The basic price is the amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any tax payable, and plus any subsidy receivable, on that unit as a consequence of its production or sale. It excludes any transport charges invoiced separately by the producer;

(b) The producer's price is the amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any VAT, or *National Accounts Statistics-Sources & Methods, 2007*  similar deductible tax, invoiced to the purchaser. It excludes any transport charges invoiced separately by the producer.

- 8.28 The amounts charged by non-market producers when they sell output at prices that are not economically significant do not constitute basic or producers' prices as just defined. Prices that are not economically significant are not used to value the output sold at such prices: instead, such output is valued by its costs of production. Neither the producer's nor the basic price includes any amounts receivable in respect of VAT, or similar deductible tax, invoiced on the output sold. The difference between the two is that to obtain the basic price any other tax payable per unit of output is deducted from the producer's price while any subsidy receivable per unit of output is added. Both producers' and basic prices are actual transaction prices which can be directly observed and recorded. When output produced for own final consumption, or own gross fixed capital formation, is valued at basic prices, it is valued at the estimated basic prices that would be receivable by the producer if the output were to be sold on the market.
- 8.29 When output is recorded at basic prices, any tax on the product actually payable on the output is treated as if it were paid by the purchaser directly to the government instead of being an integral part of the price paid to the producer. Conversely, any subsidy on the product is treated as if it were received directly by the purchaser and not the producer. The basic price measures the amount retained by the producer and is, therefore, the price most relevant for the producer's decision-taking.
- 8.30 Gross value added at basic prices: Gross value added at basic prices is defined as output valued at basic prices less consumption intermediate valued at purchasers' prices. Although the outputs and inputs are valued using different sets of prices, for brevity the value added is described by the prices used to value the outputs. From the point of view of the producer, purchasers' prices for inputs and basic prices for outputs represent the prices actually paid and received. Their use leads to a measure of gross value added which is particularly relevant for the producer.
- 8.31 Gross value added at producers' prices: It is defined as output valued at producers' prices less intermediate consumption valued at purchasers' prices. As already explained, in the absence of VAT, the total value of the

intermediate inputs consumed is the same whether they are valued at producers' or at purchasers' prices, in which case this measure of gross value added is the same as one which uses producers' prices to value both inputs and outputs. It is an economically meaningful measure that is equivalent to the traditional measure of added at aross value market prices. However, in the presence of VAT, the producer's price excludes invoiced VAT, and it would be inappropriate to describe this measure as being at "market" prices.

- 8.32 Thus in both the cases measure of gross value added and that described in the previous section use purchasers' prices to value intermediate inputs. The difference between the two measures is entirely attributable to their differing treatments of taxes or subsidies on products payable on outputs (other than invoiced VAT). By definition, the value of output at producers' prices exceeds that at basic prices by the amount, if any, of the taxes, less subsidies, on the output so that the two associated measures of gross value added must differ by the same amount.
- 8.33 Gross value added at factor cost: It is not a concept used explicitly in the 1993 SNA. Nevertheless, it can easily be derived from either of the measures of gross value added presented above by subtracting the value of any taxes, less subsidies, on production payable out of gross value added as defined. For example, the only taxes on production remaining to be paid out of gross value added at basic prices consist of "other taxes on production". These consist mostly of current taxes (or subsidies) on the labour or capital employed in the enterprise, such as payroll taxes or current taxes on vehicles or buildings. Gross value added at factor cost can, therefore, be derived from gross value added at basic prices by subtracting "other taxes, less subsidies, on production".
- The conceptual difficulty with gross value 8.34 added at factor cost is that there is no observable vector of prices such that gross value added at factor cost is obtained directly by multiplying the price vector by the vector of quantities of inputs and outputs that defines the production "other taxes or process. By definition, subsidies on production" are not taxes or subsidies on products that can be eliminated from the input and output prices. Thus, despite its traditional name, gross value added at factor cost is not strictly a measure of value added.

- 8.35 Gross value added at factor cost is essentially a measure of income and not output. It represents the amount remaining for distribution out of gross value added, however defined, after the payment of all taxes on production and the receipt of all subsidies on production. It makes no difference which measure of gross value added is used because the measures considered above differ only in respect of the amounts of the taxes or subsidies on production which remain payable out of gross value added
- 8.36 Claims on gross value added, other than payments of taxes, less subsidies, to government used to be described as "factor incomes". While the concept of factor income is no longer used in the 1993 SNA, gross value added at factor cost could be interpreted as measuring the value of the fund out of which so-called "factor incomes" can be paid: it follows that it is equal to the total value of the "factor" incomes generated by production.

### Income Approach GDP

- 8.37 GDP can also be obtained by adding together the income components that make up value added. GDP by income approach covers only the incomes generated within the domestic economy.
- 8.38 Components of value added: In principle, GDP can be computed by adding together the components of value added and taxes less subsidies on products. Value added includes:
  - a) Compensation of employees: Compensation of employees is the total remuneration in cash or in kind payable by employers to employees for the work done. Direct social transfers from employers to their employees or retired employees and their family, such as payments for sickness, educational grants and pensions that do not set up an independent fund, are also imputed to compensation of employees;
  - b) Other taxes less subsidies on production: Other taxes less subsidies on production are taxes payable by employers to carry out production, irrespective of sales or profitability. They may be payable as license fees or as taxes on the ownership or use of land, buildings or other assets used in production or on the labour employed or on the compensation of employees paid. They are not taxes paid on values of sales or produced outputs, which are called taxes on products;

# CHAPTER 8

- c) Consumption of fixed capital: Consumption of fixed capital is the cost of fixed assets used up in production in the accounting period; and
- d) Gross operating surplus: Gross operating surplus is the residual obtained by deducting the above components from value added. Thus, gross operating surplus includes interest payable to lenders of financial assets, or rent payable to rentiers of non-produced assets, such as land and sub-soil assets.

## Expenditure Approach GDP

- 8.39 Household final consumption expenditure (P.3): consists of expenditure incurred by resident households on consumption goods or services. Final consumption expenditure excludes expenditure on fixed assets in the form of dwellings or on valuables. Dwellings are goods used by their owners to produce housing services. Expenditure on dwellings by households, therefore, constitutes gross fixed capital formation. When dwellings are rented by their owners, rentals are recorded as output of housing services by owners and expenditure consumption final bv tenants. When dwellings are occupied by their owners, the imputed value of the housing services enters into both the output and final consumption expenditure of the owners. Valuables are expensive durable goods that do not deteriorate over time, are not used up in consumption or production, and are acquired primarily as stores of value. They consist mainly of works of art, precious stones and metals and jewellery fashioned out of such stones and metals. Valuables are held in the expectation that their prices, relative to those of other goods and services, will tend to increase over time, or at least not decline. Although the owners of valuables may derive satisfaction from possessing them, they are not used up in the way that household consumption goods, including consumer durables, are used up over time.
- 8.40 Consumption expenditures incurred by general government and NPISHs (P.3): The treatment of consumption expenditures incurred by general government and nonprofit institutions servina households households (NPISHs) serving is the same. Expenditures on a wide range of consumption goods and services are incurred by general government or by NPISHs, either on collective services or on selected individual goods or services. The government expenditures are financed principally out of taxation or other government revenues while those of the NPISHs are financed principally out of

subscriptions, contributions or donations or property income. Expenditures on the outputs of non-market producers that are provided free, or at prices that are not economically significant, individual to households or the community account for most of the final consumption expenditure by governments and NPISHs. It is important to distinguish between expenditures made by general government or NPISHs on the outputs of non-market producers - i.e., the goods, individual or collective services they actually produce - and the intermediate expenditures and other costs incurred by non-market producers owned by general government or NPISHs in the course of producing those goods or services. The distinction between the inputs to, and outputs from, non-market processes of production needs to be emphasized because the final consumption expenditure made by general government or NPISHs must be incurred on the outputs. The values of these expenditures are equal to the imputed values of the non-market outputs less the values of any receipts from sales. These receipts may be derived from sales of some goods or services at prices that are not economically significant or from sales of a few goods or services at prices that are economically significant (sales of secondary market output).

8.41 Saving: Saving is the balancing item in the use of income account. Saving represents that part of disposable income that is not spent on final consumption goods and services. It may be positive or negative depending on whether disposable income exceeds final consumption expenditure, or vice versa. Assuming that saving is positive, the unspent income must be used to acquire assets or reduce liabilities. In so far as unspent income is not used deliberately to acquire various financial or non-financial assets, or to reduce liabilities, it must materialize as an increase in cash, itself a financial asset. If saving is negative, some financial or non-financial assets must have been liquidated, cash balances run down or some liabilities increased. Thus, saving provides the link between the current accounts of the System and the subsequent accumulation accounts. If saving is zero, i.e., if final consumption expenditure equals disposable income, the institutional unit is not obliged to liquidate any assets or change any of its liabilities. Therefore, disposable income can, therefore, be interpreted as the maximum amount that an institutional unit can afford to spend on final consumption goods and services in the accounting period without having to reduce its cash, liquidate

other assets or increase its liabilities. Nonfinancial and financial corporations have no final consumption expenditure or actual final consumption. Their net saving is equal to their net disposable

8.42 Gross capital formation is measured by the total value of the gross fixed capital formation, changes in inventories and acquisitions less disposals of valuables. Gross fixed capital formation is measured by the total value of a producer's acquisitions, less disposals, of fixed assets during the accounting period plus certain additions to the value of non-produced assets realised by the productive activity of institutional units. Fixed assets are tangible or intangible assets produced as outputs from processes of production that are themselves used repeatedly or continuously in other processes of production for more than one year. There is substantial diversity in the different types of gross fixed capital formation that may take place. The following main types may be distinguished:

(a) Acquisitions, less disposals, of new or existing tangible fixed assets, subdivided by type of asset into:
(i) Dwellings;
(ii) Other buildings and structures;

(iii) Machinery and equipment; (iv) Cultivated assets - trees and livestock that are used repeatedly or continuously to produce products such as fruit, rubber, milk, etc.;

CHAPTER 8

(b) Acquisitions, less disposals, of new and existing intangible fixed assets, sub-divided by type of asset into: (i) Mineral exploration; (ii) Computer software; (iii) Entertainment, literary or artistic originals; (iv) Other intangible fixed assets;

(c) Major improvements to tangible nonproduced assets, including land;

(d) Costs associated with the transfers of ownership of non-produced assets.

### Main identities

8.43 Given the general explanations of the previous section, the main identities connecting the aggregates of the SNA 1993 are summarized in this section: GDP at market prices is defined from the expenditure side as:

(II) Ot	ther	buildings	and	structures;	
Household final consumption expenditure at purchasers' prices					
+ NP	<ul> <li>+ NPI final consumption expenditure at purchasers' prices</li> <li>+ Government final consumption expenditure at purchasers' prices</li> <li>+ Gross fixed capital formation at purchasers' prices</li> </ul>				
+ Gov					
+ Gro					
+ Acc	+ Acquisition less disposals of valuables at purchasers' prices				
+ Cha	+ Changes in inventories				
+ Exp	+ Exports at purchasers' prices at the frontier (f.o.b.)				
- Im	- Imports valued f.o.b.				

8.44 Given this definition of GDP, the following identities hold when the summations are

taken over all resident producers:

(a) GDP = the sum of the gross values added at producers' prices + taxes, less subsidies, on imports + non-deductible VAT;
(b) GDP = the sum of the gross values added at basic prices + all taxes, less subsidies, on products
(c) GDP = the sum of the gross values added at factor cost + all taxes, less subsidies, on products + all other taxes, less subsidies, on products
In cases (b) and (c) the item taxes, less subsidies, on products includes taxes and subsidies on imports as well as on outputs

### Volume measures

8.45 The SNA emphasizes calculation at constant prices, that is, use of the system(s) of prices which prevailed in a past period(s). The changes over time in the current values of flows of goods and services and of many kinds of assets can be decomposed into changes in the prices of these goods and services or assets and changes in their volumes. Flows or stocks at constant prices take into account the changes in the price of each item covered. They are said to be in volume terms. However, many flows or stocks do not have price and quantity dimensions of their own. Their current values may be deflated by taking into account the change in the prices of some relevant basket of goods and services

### Gross and net concept

8.46 Gross domestic product (GDP) at market prices represents the final result of the production activity of resident producer units.

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- 8.47 GDP is also equal to the sum of the final uses of goods and services (all uses except intermediate consumption) measured in purchasers' prices, less the value of imports of goods and services.
- 8.48 Finally, GDP is also equal to the sum of primary incomes distributed by resident producer units.
- 8.49 Net domestic product (NDP) is obtained by deducting the consumption of fixed capital from GDP.
- 8.50 The concept of value added should conceptually exclude the counterpart of consumption of fixed capital. The latter, in effect, is not newly created value, but a reduction in the value of previously created fixed assets when they are used up in the production process.