

NATIONAL ACCOUNTS

The system and methods

Introduction

The purpose of this manual is to help simplify the national accounts learning process. Ideally, the national accounts compilation is done by staff with a full understanding of the accounting system as defined in the 1993 System of National Accounts and subsequent guidelines. It is also desirable that the staff have an economic background to enhance the relevancy, accuracy and use of Palau's national accounts. A basic accounting knowledge is also very valuable in understanding the system and seeing the parallels with normal financial accounting.

The reader of this manual is strongly urged to continue to study the SNA system and to keep abreast of developments in the field. The IMF has some useful working papers on the subject matters, there are numerous web resources including the UN Statistics Division.

National Accounts

What are they anyway and who says how we should do them.

To many people, the term national accounts perhaps has very little meaning. However throw a term like GDP at them and it's likely they will have heard of that but not really know exactly what it is. A large corporation would not consider operating without an accounting system. It is even more important for a nation to maintain its own accounting system. This is not only to fulfill its obligations to the international community but more importantly it provides a basis for formulation and assessment of economic policies.

National accounts are simply the accounts for a nation but the manner in which they are constructed is what we call the *System of National Accounts* (SNA). The most accepted manual for this system is the 1993 System of National Accounts (SNA93) manual produced by the Inter-Secretariat Working Group on National Accounts which represented the Commission of the European Communities, the International Monetary Fund, the Organisation for Economic Co-operation and Development; the United Nations and the World Bank.

The SNA93 sets out a central framework of integrated economic accounts. This is referred to as just SNA or just 'the system'.

The system relies on being able to collect and compile data on all parts of the economy and to organize the measurement units in a codified and structured manner. The resultant accounts are financial in manner and are interlinked with other accounting systems such as government financial statistics (GFS) and the balance of payments (BoP). Each of these systems has a manual authored entirely or in collaboration with the International Monetary Fund (IMF).

The SNA is an accounting system that provides a format for comprehensive analysis in a pre-described and also an ad-hoc manner. How detailed the analysis can be depends somewhat on the detail provided in the accounts that a country compiles.

The SNA manual does not dictate what accounts a country prepares; it only goes part way in setting out example accounts and suggests customization. There have been numerous updates and supplemental reports prepared that give more depth to the recommended approach to national accounts compilation.

It is also important to note that some of the ideas in the SNA manual are already getting outdated and that there are several errors in it.

Defining the economy

To prepare national accounts it is necessary to have a common understanding of what defines the economy. National accountants represent the economy in a way that is illustrated in Figure 1. The boxes coincide with the account categories that are used in the SNA.

It is also necessary to understand the measurement units that we use to measure the total economy and its various sectors.

Diagram of the integrated economic accounts for the total economy

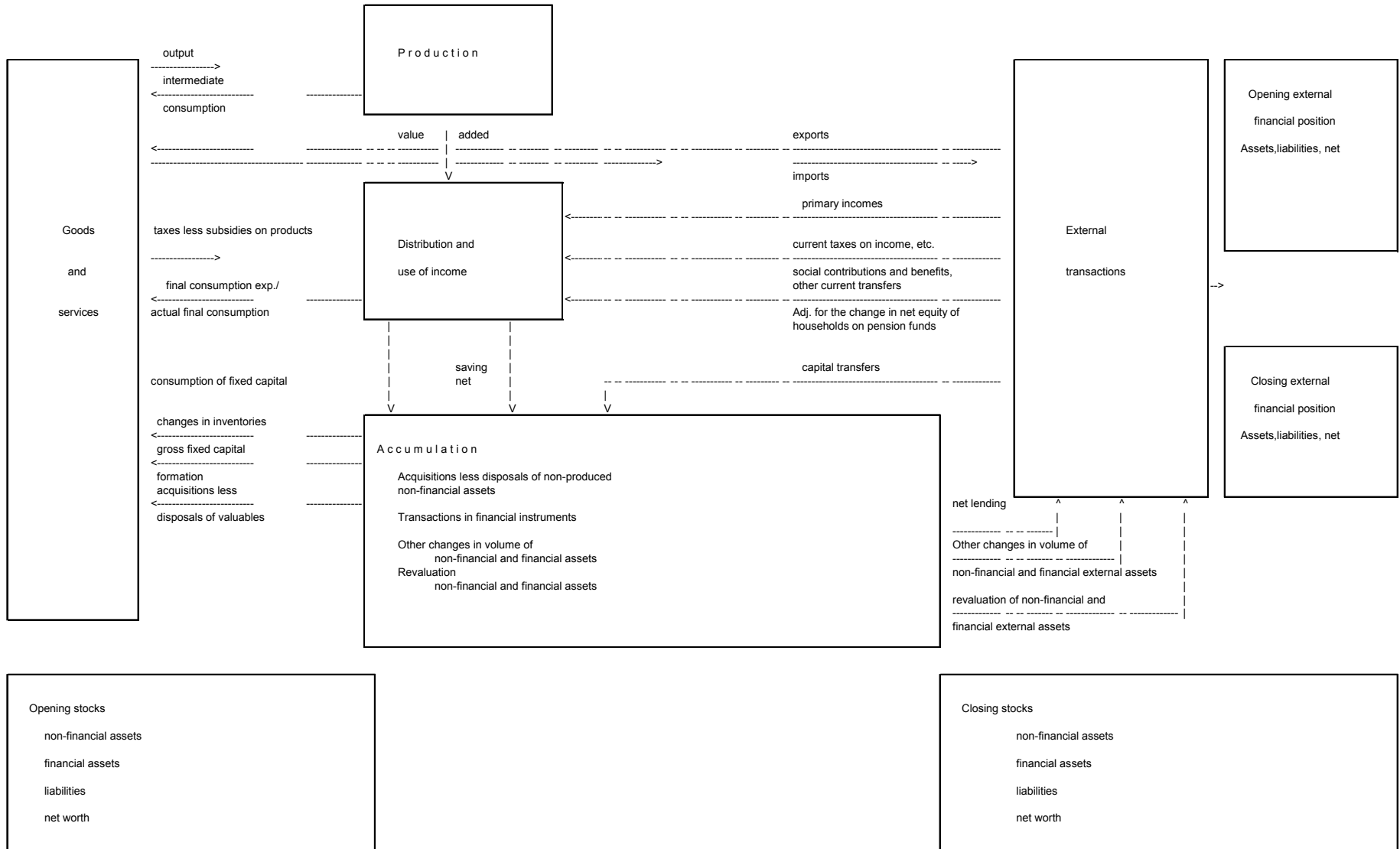


Figure 1: The National Accounts System

Units of measurement

In the SNA terms like *enterprise*, *establishment* and *institution* have special meaning. The SNA divides the transactors in the economy up into institutional sectors (IISC) and into industries (ISIC). Institutional sectoring allows the transactors to be grouped by their ownership structure while industrial sectoring groups them into the type of production activity they undertake.

It is important to note the industries are only relevant for a relatively small part of the system.

Briefly, the following is a guide how to use the terms in the correct context which is helpful in avoiding confusion.

Industry is a fairly well understood term as it relates to the output of production and is the usual way we think of dividing up the economy. However equally important, if not more so, economists and policy makers need analysis based on ‘institutional’ sectoring. Institutional sectors relate to the ownership of the resources used in production and beyond that, the classification system for distributors and users of income and transfers, consumers, savers, and investors, asset owners, borrowers and lenders.

Table 1: Institutions and Enterprises

Classification	Unit	Type
Sectors	Institution	<ul style="list-style-type: none">• Legal/social<ul style="list-style-type: none">- corporations- quasi-corporations- non profit institutions (NPI)• Households
Industry	Enterprises split into establishments	<ul style="list-style-type: none">• Corporations (=institution)• NPI (=institution)• Unincorporated enterprise (not =institution¹)<ul style="list-style-type: none">- household producer- government producer

Enterprises

Industry is a concept that only makes sense if the type of output produced is as homogeneous as possible. The reason we sometimes divide *enterprises* up into *establishments* is because enterprises can be involved in a variety of industries² (e.g. W.C.T.C. in Palau).

¹ The household producer enterprise is not an institution, the household itself is.

² Refer to SNA 5.17

An *establishment* is a unit that is both a *kind of activity unit*³ and a *location unit*⁴. To loosely compare to the parent/subsidiary structure seen in many company accounts, the enterprise would consist of the entire consolidated entity and the establishments would be the individual subsidiaries and the parent. The subsidiaries would be in their respective industry and the parent would likely be in the finance industry (as a holder investor).

SNA93 Sections 5.25-5.26 provide a good summary of what an enterprise represents. It is essentially an activity unit that has accounts maintained for it that relate to its activity, it however does not automatically coincide with the institutional unit which by its definition is the legal entity. Therefore it is only meaningful to produce a production account and a generation of income account by industry, based on enterprise data since the other accounts are crucially based on ownership (i.e. institutional units). In many cases the enterprise and the institution are one in the same, however there are many instances where it is not the case and the institution spans more than one enterprise.

Institutions

The total economy can be defined in types of institutional units. The SNA proposes the following sectoring of institutions:

- S.11 Non-financial corporations
- S.12 Financial corporations
- S.13 Government
- S.14 Households
- S.15 Non-profit institutions serving households (NPISH)

An example distinguishing industry from institutional sectors

Industries (for which ISIC is relevant) are made up of enterprises that form a part or the whole of institutions from a variety of sectors. For example within the manufacturing industry there may be:

³ An enterprise or part of an enterprise, which engages in only one kind of productive activity or in which the principal productive activity accounts for most of the value added.

⁴ An enterprise or part of an enterprise, which engages in productive activity at or from one location, refer to SNA Section 5.20

- incorporated enterprises (non-financial corporate sector)
- government owned quasi-corporations (non-financial corporate sector)
- publicly owned corporations (non-financial corporate sector)
- small unincorporated enterprises eg. Storyboard carver (household sector)
- unincorporated enterprises run like a separate legal entity – treated as a quasi-corporation (non-financial corporate sector)
- non-profit, non-market and not financed by government, enterprises (i.e. NPISH sector) (e.g. operated by a relief agency)
- non-profit market enterprises (non-financial corporate sector) (e.g. owned by a religious organization)

Each one of these types of enterprises, while possibly in the same industry, behaves quite differently due to their ownership structure and it is this difference that often defines how income and wealth is distributed in an economy.

Household sector

DEFINING THE HOUSEHOLD SECTOR

For a full description of the household sector, refer to the SNA manual 4.132 - 4.160. It is worthwhile to pin down some of the key considerations.

It may initially be assumed that the output of the household sector would be small (with thought to subsistence farming, local crafts etc.), however this is not the case under the definition of the household sector used by the SNA. The sector is diverse and can actually be the largest productive sector in an economy.

In the absence of taxation legislation that would require full disclosure from all businesses, the non-corporate and non-government enterprises are regarded as belonging to the household sector. This is consistent with the recommendation of the SNA93 manual.

As distinct from the corporate sector, *unincorporated enterprises* operated by individuals are not separate legal entities. The assets and liabilities belong to the owners and not to the enterprises. The unincorporated enterprises include the typical ‘ma and pa’ stores, a multitude of small businesses and many large businesses operated by a sole proprietor or in partnership.

Production of the household sector is by way of either operating their own unincorporated enterprises or supplying labor to other enterprises by working as employees.

SCOPE OF PRODUCTION

Output comprises market, non-market and for own final use output. The scope of production as per the SNA for the household sector comprises of

- own-account housing services (for which we have reasonable social security data for domestic workers)
- owner-occupied housing (we have some estimates based on census data)
- unincorporated enterprises (we have social security data for the employers)

SOURCES OF INCOME

1. **Mixed income** is the national accounting term for combining compensation of employees and operating surplus together when it is difficult to distinguish the contribution of one from the other. Households provide both labor and entrepreneurship in difficult to determine proportions.
2. **Compensation of employees** refers to the salaries and wages paid in addition to any benefits received by the employees including employer social security contributions, housing, and goods in kind, etc.
3. **Property and transfer incomes** deriving from the ownership of assets or receipt of money or other type of transfer from other sectors, such as from the government sector.

SUB-SECTORS OF THE HOUSEHOLD SECTOR

Households can be classified in many different ways. The SNA93 manual suggests classifying them according to the source of income as shown above as well as if they earn income through the production of paid employees or through the production on their own-account. The classifications are as follows and are based on the predominant source of income.

- Employers (S.141)
- Own-account workers (S.142)
- Employees (S.143)
- Recipients of property transfer incomes (S.144)

INFORMAL SECTOR

Another useful sub-sectoring of the household sector may be to distinguish the formal from the informal sector. The informal sector consists entirely within the household sector⁵ and comprises

- informal own-account enterprises
- enterprises of informal employers

This is an ongoing field of development for statisticians and the definitions of the informal sector remain fairly vague and therefore it is really up to Palau how best to define the sector. It may be desirable at some stage to come up with criteria to apply to the characteristics described in subparagraphs 5 (1) and (2) of the Annex to Chapter 4

⁵ SNA Manual, p111

in the SNA93 manual or to see if this has been done for other developing Pacific countries.⁶

Non profit institutions serving households (NPISH)

NPISH are a subset of non profit institutions (NPI). NPI can be market or non-market oriented, they can be government or non-government controlled and financed. NPI can, despite their name, also make profits. Where the definition applies is in the fact that any profits cannot be distributed to shareholders.

NPISH are all resident NPI's **except**:

- NPIs that are market producers, and
- non-market NPIs that are controlled and mainly financed by government units.

NPISH are non-market non-profit institutions that are not controlled or mainly financed by government.

The two main kinds of NPISH are:

1. Trade unions, professional or learned societies, consumers' associations, political parties, churches or religious societies, and social, cultural, recreational and sports clubs;
2. Charities, relief and aid organisations financed by voluntary transfers in cash or in kind from other institutional units.

In Palau, these organizations are numerous but generally their economic output is relatively small.

Corporate sector

This sector represents those institutions that have been established under legislation and/or that have a full set of financial accounts available. The corporate reporting system as administered by the Attorney General's office provides us with a population for the corporate sector as per the legislation requirement as well as the detail required for reasonable production and income account estimates.

QUASI-CORPORATIONS

A quasi-corporation is an unincorporated enterprise that behaves like a separate legal entity from its owners in the sense that a full financial set of accounts is maintained for its operations and these accounts are available for statistics compilation.

⁶ I have subsequently received the reports mentioned as well as an Australian report titled *Informal Sector Statistics: Australian Views on the International Definition, Minimum Dataset, and Selected Data Collection Issues* - Zia Abbasi, Australian Bureau of Statistics.

The system accounts

The SNA is made up of integrated economic accounts as follows. Figure 1 represents these accounts as well as the flows between them.

Account	Name	Main aggregate
INSTITUTIONAL ACCOUNTS		
I./II. CURRENT ACCOUNTS		
I. Production		
I	Production ⁷	Domestic product (GDP/NDP)
II. DISTRIBUTION AND USE OF INCOME ACCOUNTS		
II.1	Primary distribution of income ⁸	National/domestic income (GNI/NNI)
II.2	Secondary distribution of income	National disposable income (GNDI)
II.3	Redistribution of income in kind	Adjusted national disposable income
II.4	Use of income	National saving (\$)
III. ACCUMULATION ACCOUNTS		
III.1	Capital	Net lending/borrowing
III.2	Financial	Net lending/borrowing
III.3	Other changes in assets	Change in net worth
IV. BALANCE SHEETS		
IV.1	Opening balance sheet	Net worth
IV.2	Changes in balance sheet	Change in net worth
IV.3	Closing balance sheet	Net worth
TRANSACTION ACCOUNTS		
0.	Goods and services account	National expenditure
REST OF THE WORLD		
V. REST OF THE WORLD ACCOUNT		
V.I/II CURRENT ACCOUNTS		
V.1	External goods and services	External balance of goods and services
V.II	External primary income and current transfers	Current external balance
V.III. ACCUMULATION ACCOUNTS		
V.III	External accumulation	National net lending/borrowing
V.III. BALANCE SHEETS		
V.IV	External assets and liabilities	National net external financial position

It is useful to always view the accounts as a part of a system and not to focus just on one account such as compilation of GDP. By seeing it as a system, we can understand

⁷ Can also be compiled by industry (ISIC).

⁸ This has two main sub accounts, the generation of income account can also be represented by industry (ISIC).

that each entry is represented in multiple places and that balances need to be maintained. There are also important time series considerations and so the compilation of national accounts should be looked at in a multi-dimensional manner.

Goods and services account

This account presents the uses and sources of goods and services in the economy. It is not a sector based account since it is a measure of the goods and services flowing through an economy. It is not concerned with the transactors in the economy. To derive this account really requires the subsequent accounts to be produced first. Therefore we won't turn our attention to its compilation initially however it is useful to understand what it represents.

In an economy there are goods and services, and there is production that provides the income that drives consumption of those goods and services. When we look at the value of the flow of goods and services we find on the (re)sources side the following:

- Output (domestic production)
- Imports

We also add on taxes on production (mostly import taxes) and deduct any subsidies to this side of the account as by doing so we arrive at the final market price valuation of the output and not simply that received by the producers (which would be valuing output at *basic prices*)

On the other side of the goods and services account we look at the uses of goods and services. This consists of the two types of consumption:

- Intermediate consumption (goods and services used in the production of other goods and services)
- Final consumption (C)

and...

- Not all goods and services are used in (current, i.e. within the period) consumption and therefore we add to this, capital formation (e.g. lumber going into the construction of a warehouse)
- and changes in inventories (representing assets from another production period⁹).
- We also add on the net acquisition of valuables (such as diamonds and other stores of value).

⁹ SNA 10.7

- Then the only thing left is those goods and services that left the economy by way of exports.

When looking at the goods and services account then, we see it includes on one side intermediate consumption and on the resources side, output. It is at that level we see the crossover with the next account, the production account.

In the production account we derive GDP but it is useful to state that:

$$\begin{aligned} \text{GDP} &= \text{output less intermediate consumption (i.e. gross valued added)} \\ &= \text{compensation of employees + operating surplus + taxes, less subsidies on} \\ &\quad \text{products (W+OS+TSP)} \\ &= \text{consumption + investment + net exports } C+I+(X-M) \end{aligned}$$

These three formulae represent the three ways we can measure GDP, the first being the production approach, the second being the income approach and the last being the expenditure approach. However, in saying that it is important to realize that GDP is a production concept, it is simply the balancing item of the production account. Its use as the opening item in the generation of income account also reflects that the sum of the primary incomes and operating surplus is by definition equal to GDP. As an analogy, while it is possible to derive net profit from a balance sheet, we wouldn't say that we are using the 'balance sheet approach' to derive net profit. It is better to realize the series of interconnections between the national accounts by way of balancing items and not get fixated with the idea of GDP as many are wont to do when looking at national accounts.

Production Account (I.)

Value added is the balancing item of the production account; we sum up total value added and call it 'GDP'

The first account we begin with is the production account. It is a fairly basic table that has two main entries, one being output, the other being intermediate consumption. The residual of these is *gross domestic product* (GDP). The tables can be prepared by industry and/or by institutional sector.

As the most widely referenced national accounting statistic, GDP is also perhaps the most misunderstood concept¹⁰. It is probably understood as something akin to total output rather than a net concept – something like revenue instead of net profit. However, the 'gross' refers to whether or not the amount of capital 'consumed' during

¹⁰ Refer to SNA 1.69

the period is netted off or not¹¹. Gross/Net Domestic Product is synonymous with the term gross/net *value added* (GVA).

$$GDP = \sum VA$$

Account I: Production account																		
Uses								Resources										
	S.2	S.1	S.15	S.14	S.13	S.12	S.11	S.11	S.12	S.13	S.14	S.15	S.1	S.2				
	Goods and services account	Rest of the world account	Total Economy	Non-profit institutions serving households	Households	General government	Financial corporations	Non-Financial Corporations	Non-Financial Corporations	Financial corporations	General government	Households	Non-profit institutions serving households	Total Economy				
Total									Transactions and balancing items							Total		
249	249								P.1	Output 1/	131	8	72	35	3	249		249
171	171								P.11	Market output	131	8	0	32	1	171		171
4	4								P.12	Output for own final use		0	0	4	0	4		4
74	74								P.13	Other non-market output		72	0	2	74		74	
136			136	1	15	40	3	76	P.2	Intermediate consumption								136
13	13								D.21-D.31	Taxes less subsidies on products 1/					13			13
126			126	2	20	31	5	54	B.1g/B.1*g	Value added, gross/ gross domestic product 2/								
15			15	0	3	2	0	10	K.1	Consumption of fixed capital								
110			110	2	17	29	4	45	B.1n/B.1*n	Value added, net/ net domestic product 2/								

The only difference is that taxes-less-subsidies on production are added to the value added estimates to arrive at GDP. Also, in the absence of actual estimates for *financial intermediation services indirectly measured* (FISIM)¹² being apportioned to the intermediate consumption, then a final adjustment is made by deducting bank service charge from total GVA¹³.

GDP is not the sum total of national accounts but only one of many useful measures of the economy. It is possible to combine it with other statistics to produce other interesting measures; the most common is GDP per capita, a widely used and misused statistic. One of the key reasons for its inappropriateness, especially in developing countries, is that it gives no indication of the distribution of income. It also provides no information about the sustainability of the production or the amount of economic capacity utilization (the difference between actual GDP and potential GDP is referred to as the GDP gap).

In simple terms, GDP is the difference between the total value of outputs of an economy and the value of goods and services used up in that production.

¹¹ Refer to SNA 6.201

¹² Refer to SNA 6.125 for definition

¹³ It's not necessary to get bogged down with the detail on this at this stage but it is a fairly simple concept that says that financial intermediaries pass on, as a part of the interest margin they make, a service charge to their debtors and creditors. If we totally exclude interest expenditure and income from the production accounts of non-financial institutions then we are also excluding the smaller portion of this that actually does represent a consumption of the financial intermediation *service* component. Therefore, we are adding this back onto intermediate consumption thereby reducing value added.

Methods of valuation

No value added tax (VAT) system exists in Palau so we do not need to consider whether or not the system will be net or gross of a VAT. The SNA requires that we remove VAT if Palau did have it as businesses normally exclude it from their accounts. The absence of a VAT also means that that GDP is the same if measured in producers' or purchasers' prices¹⁴. We still need to consider whether or not we will be using basic or producer prices. The SNA93 manual says that basic prices are preferred.

GVA at basic prices is defined as output valued at basic prices less intermediate consumption valued at purchasers' prices. Whereas GVA at producers' prices (and in the absence of VAT- purchasers' prices) is the same as that for GVA at basic prices except that output is valued using producer prices. The only difference between GVA at basic prices and producer prices is the value of taxes less subsidies on products (see below). The terminology is unnecessarily confusing and so a quick example.

GVA measured at basic prices would exclude the tax placed on alcohol and tobacco on the output side whereas for producer prices it would include it. The latter valuation is more in line with what is often referred to as 'market prices' (with the exclusion of VAT).

Defining output

In the SNA, output is defined as the sum of the following (the reference in brackets is the section in the SNA93 manual that gives the definition):

- I. P.11 Market output (6.45)
- II. P.12 Output for own final use (6.46 and see below)
- III. P.13 Other non-market output (6.49)
- IV. D.21 & D.31 Taxes on products and imports less subsidies (see below)

P.12 OUTPUT FOR OWN FINAL USE INCLUDES:

- housing of owner-occupiers
- employment of paid domestic staff
- own account capital formation (OAKF)

¹⁴ SNA93 6.227

D.21 TAXES ON PRODUCTS INCLUDE:

- D.211 VAT (not relevant to Palau)
- D.212 taxes and duties on imports, excl.VAT – this includes the 3% general rate currently applied as well as the specific excise duties such as liquid fuel tax
- D.213 export taxes – fish export tax
- D.214 taxes on products, except VAT, import and export taxes – this includes gross receipts tax (GRT)¹⁵. Also included is hotel room tax and vessel cabin tax for live aboard boats.

D.31 SUBSIDIES ON PRODUCTS INCLUDE:

- D.311 import subsidies
- D.312 export subsidies
- D.319 other subsidies on products

The only subsidy on products in Palau is that paid to the public utilities company (PUC). Other subsidies paid by the government are included under subsidies on *production* as they are not specifically tied to any level of output. These include payments made to Palau Community College, Palau Housing Authority, Palau Visitors Authority and the national museum.

IN TERMS OF THE CORPORATE REPORTS

The questionnaire that is completed by corporations, partnerships and non-profit institutions include the following questions that are used to calculate output.

- Sales of resale goods *minus* purchases of resale goods
 - + sales of goods manufactured
 - + income from services
 - + other operating income
- and add* change in stocks of:
- + Resale stocks (closing stocks *minus* opening stocks) and
 - + finished goods (closing stocks *minus* opening stocks)

Note that for non profit institutions serving households (NPISH) and general government, output is assumed to be equal to the total value of their inputs since it is assumed that there is no operating surplus and these institutions usually provide their services with no market price.

With the old corporate reports used up until and including 1999, the following questions were included in output.

¹⁵ See SNA 7.69

- Sales - Own Production
- + Sales of Prepared Food
- + Income from R&M
- + Margin (on non-transformed goods)
- + Rental (should have been excluded)
- + Interest Margin (for finance industry only)
- + Income from Services
- + Income from Fees etc
- + Other income

Defining intermediate consumption

Again, referring back to the goods and services account, we see that consumption consists of either intermediate consumption or final consumption. Put simply, goods and services are either consumed in the production of other goods or services or they are consumed by the end user (or exported).

If we didn't measure intermediate consumption and simply added the output of all enterprises in the economy we would get massive over valuation since the net production would be much less given that so much was consumed in the production processes.

Intermediate consumption is therefore a relatively easy concept in that it represents the purchases of goods and services by institutions and households in their capacity as producers. What is not included in intermediate consumption is:

- expenditure on labor (compensation of employees)
- depreciation (which is a payment for capital)
- non-operating expenditure (which includes interest expense which is a financing expenditure and not an operating expenditure which is to do with inputs into a production process).
- Taxes-less-subsidies on products paid to government

These are inputs that we do not include in intermediate consumption since they would not be double-counted like goods and services would be since they are recorded as other producers' outputs.

IN TERMS OF THE CORPORATE REPORTS

In line with the definition of intermediate consumption found in the SNA manual, SNA 6.147-9, the following questions from the annual corporate reports are included in the calculation.

- Purchases of other goods (other than those purchased for resale – included in output calculation)
- + charges or fees paid to other businesses
- + communication expenses
- + utilities
- + transportation and freight
- + oil, gas and other fuel purchases
- + insurance premiums¹⁶
- + rental expenditure (SNA 6.148)
- + repairs and maintenance of plant, machinery and equipment
- + other operating expenses

and deduct change in stocks of:

- Raw materials (closing stocks minus opening stocks)
- Work in progress (closing stocks minus opening stocks)

With the old corporate reports used up until and including 1999, the following questions were included in intermediate consumption.

¹⁶ While this has been included, it shouldn't be in its entirety as we can decompose insurance premiums into both the service component and the net premium value, it is only the service component that represents intermediate consumption. In effect it's identical to interest expenditure in that only a portion should be deducted for valuation of value added. In theory we should make a final adjustment to offset the inclusion of net premiums – see SNA Annex IV

- Purchase of Raw Materials
- + Oil, gas, fuel
- + Power & Water
- + Rental of PM&E
- + Transportation
- + Rental of Buildings
- + R&M of PM&E
- + R&M Buildings
- + Insurance premiums
- + Other expenditure

There were no inventory estimates and so inventory change was assumed to be zero for both output and intermediate consumption.

Distribution and use of income accounts

After the production account, the next accounts in the system are the distribution and use of income accounts, the first being the primary distribution of income account which is actually two accounts – the generation of income account and the allocation of primary income account.

As stated above, if we compare output less intermediate consumption (which equals gross value added) at the total economy level with the sum of incomes we arrive at the same number which is GDP.

$$\text{GDP} = \text{W} + \text{OS} + \text{TSP} + \text{CFK} = \text{GVA} = \text{Y} - \text{IC}$$

Where

W	:	compensation of employees (a payment to labour)
OS	:	gross operating surplus ¹⁷ (a payment to the entrepreneur)
TSP	:	taxes less subsidies on production (to use market prices)
GVA	:	gross value added
Y	:	output
IC	:	intermediate consumption

¹⁷ Including consumption of fixed capital

Primary distribution of income account (II.1)

This account consists of two consecutive accounts: the generation of income account (II.1.1) and the allocation of primary income account (II.1.2). The generation of income account has GDP as the opening balance. At the bottom of the account the balancing item is operating surplus¹⁸ that becomes the opening balance in the next account that provides national income as its balancing item. National income is a term that like production can be expressed in gross or net terms depending on whether or not CFK is included. Gross national income (GNI) is a term that used to be called GNP that is still in common usage but it is not the correct term as per SNA93.

$$\text{GNI} = \text{GDP} + Y_f$$

The last term is the net factor income from abroad, that basically means adding on incomes from non-residents and deducting income payable to non-residents. These flows relate to investment income (dividends), interest payments and labor income of migrant or seasonal workers. They do not include transfers which are payments unrelated to production or the ownership of assets

Note that this is a confusing description in the sense that GDP uses the term ‘domestic’ and GNI uses ‘national’ but both are measured across the same institutions¹⁹. It could just as easily be called gross domestic income and still be the correct term. However the convention is to call it GNI.

As can be seen in Account II.1.1, on the *uses* side (i.e. the left side) we see the main items, compensation of employees and operating surplus that goes to the owners of the institutions. Again, to match this with GDP at basic prices we have to add on taxes less subsidies on products (D.21 – D.31). The other tax is D.29 *other taxes on production* and includes such items as wages tax, business licenses and other incomes that the government earns as a result of the production taking place or the ownership of productive assets.

¹⁸ Including mixed income

¹⁹ See SNA 7.17

Account II.1.1: Generation of income account											2000								
Uses											Resources								
		S.1	S.15	S.14	S.13	S.12	S.11				S.11	S.12	S.13	S.14	S.15	S.1			
	Goods and services account	Rest of the world account	Total economy	NPISH	House-holds	General government	Financial corporations	Non financial corporations	Transactions and balancing items		Non financial corporations	Financial corporations	General government	House-holds	NPISH	Total economy	Rest of the world account	Goods and services account	Total
Total									B.1g/B.1*g Value added, gross/ gross domestic product 1/		45	5	33	13	1	113			113
									B.1n/B.1*n Value added, net/ net domestic product 1/		40	4	30	13	1	106			106
78			77.7	0.9	9.6	32.8	2.0	32.3	D.1 Compensation of employees										
72			71.9	0.8	8.7	30.5	1.9	30.0	D.11 Wages and salaries										
6			5.7	0.1	0.8	2.4	0.1	2.4	D.12 Employers' social contributions										
6			5.7	0.1	0.8	2.4	0.1	2.4	D.121 Employers' actual social contributions										
0			0.0	0.0	0.0	0.0	0.0	0.0	D.122 Employers' imputed social contributions										
17			16.9	0.8	5.7	0.0	2.5	8.0	D.2 Taxes on production and imports										
15			15.3	0.7	5.2	0.0	2.2	7.2	D.21 Taxes on products 2/										
0			0.0	0.0	0.0	0.0	0.0	0.0	D.211 Value added type taxes (VAT)										
8			8.1	0.4	2.8	0.0	1.2	3.6	D.212 Taxes and duties on imports excluding VAT										
2			1.6	0.1	0.5	0.0	0.2	0.7	D.2121 Import duties										
7			6.5	0.3	2.3	0.0	1.0	2.9	D.2122 Taxes on imports excluding VAT and duties										
1			0.6	0.0	0.0	0.0	0.0	0.6	D.213 Export taxes										
7			6.7	0.3	2.3	0.0	1.0	3.0	D.214 Taxes on products except VAT, import and export taxes										
2			1.6	0.1	0.6	0.0	0.2	0.7	D.29 Other taxes on production										
2			1.5	0.0	0.0	0.0	0.0	1.5	D.3 Subsidies										
2			1.5	0.0	0.0	0.0	0.0	1.5	D.31 Subsidies on products 2/										
0			0.0						D.311 Import subsidies										
0			0.0						D.312 Export subsidies										
2			1.5					1.5	D.319 Other subsidies on products										
0			0.0						D.39 Other subsidies on production										
0			0.4	-0.7	-2.2	0.0	0.1	3.2	B.2g Operating surplus, gross										
0			0.0		0.0				B.3g Mixed income, gross										
-7			-7.0	-0.7	-2.2	-2.4	-0.1	-1.6	B.2n Operating surplus, net										
0			0.0		0.0				B.3n Mixed income, net										

1/ For the total economy this item corresponds to gross domestic product, net domestic product respectively. It is equal to the value added of the institutional sectors plus taxes less subsidies on products.

2/ For the valuation of output and the resulting contents of the items "Taxes on products" and "Subsidies on products", refer to chapter VI, paragraphs 6.210 to 6.227.

This can be done for establishments by industry also, the allocation of primary income account can not be.

Figure 2: Primary distribution of income account example

Basically we are saying that the domestic production (GDP or NDP) is the same as the incomes earned from the production process. This makes intuitive sense if you think about how if something is made, its creation produces income (realized or unrealized) for the owner of the process (including an allowance for depreciation of capital), the workers in the process and the government.

Industry accounts

The national accounts we most often see are at the industry level. We have briefly covered both the production account (I.) and the generation of income account (II.1.1) - one measuring the value of production; the other the incomes earned from the production or the ownership of productive assets. It is only these two accounts that we can meaningfully sector the economy into industries since they are directly related to the production process.

The measurement unit is theoretically different for industry estimates and institutional sectors. The former is based on establishments, the latter is based on institutions. We should arrive at the same totals either way but the availability of data is such that we often only have data for establishments. The consolidation of establishment data into institutional accounts is difficult and either requires some complicated manipulation of the data or simply a different survey instrument. As an example, industry level production and primary distribution of income accounts would require data for a large corporation's separate trading arms (establishments) such as corporate office, hotels, beer brewery, retail, motor repair, etc. However the institutional accounts would consolidate these into the one institution for which the board of directors has control over. The overall totals will match but the existence of inter-company flows would mean that simply summing up establishment records without netting off these flows would result in an inflated total.

Secondary distribution of income account (II.2)

This is the second sub-account of the primary distribution of income account.

Account II.2: Secondary distribution of income account										GNDI=GNI + Yf								
Uses										Resources								
Total	Goods and services account	Rest of the world account	S.1	S.15	S.14	S.13	S.12	S.11	Transactions and balancing items	S.11	S.12	S.13	S.14	S.15	S.1	Rest of the world account	Goods and services account	Total
			Total economy	NPISH	House-holds	General government	Financial corporations	Non financial corporations		Non financial corporations	Financial corporations	General government	House-holds	NPISH	Total economy			
									B.5g/B.5* Balance of primary incomes, gross/National income, gross	-127	-31	45	179	1	68			68
									B.5n/B.5* Balance of primary incomes, net/National income, net	-132	-31	15	179	1	32			32
213	1		212		178		10	24	D.5 Current taxes on income, wealth, etc.						213			213
204	1		203		176		7	20	D.51 Taxes on income						204			204
9			9		2		3	4	D.59 Other current taxes				9		9			9
322			322		322				D.61 Social contributions	14	39	268		1	322			322
303			303		303				D.611 Actual social contributions	2	38	263			303			303
174			174		174				D.6111 Employers' actual social contributions	1	18	155			174			174
160			160		160				D.61111 Compulsory employers' actual social contributions	1	15	144			160			160
14			14		14				D.61112 Voluntary employers' actual social contributions		3	11			14			14
97			97		97				D.6112 Employees' social contributions	1	20	76			97			97
85			85		85				D.61121 Compulsory employees' social contributions	1	15	69			85			85
12			12		12				D.61122 Voluntary employees' social contributions		5	7			12			12
32			32		32				D.6113 Social contributions by self- and non-employed persons			32			32			32
22			22		22				D.61131 Compulsory social contributions by self- and non-employed persons			22			22			22
10			10		10				D.61132 Voluntary social contributions by self- and non-employed persons			10			10			10
19			19		19				D.612 Imputed social contributions	12	1	5		1	19			19
332			332	1		289	29	13	D.62 Social benefits other than social transfers in kind				332		332			332
232			232			232			D.621 Social security benefits in cash				232		232			232
29			29				28	1	D.622 Private funded social benefits				29		29			29
19			19	1		5	1	12	D.623 Unfunded employee social benefits				19		19			19
52			52			52			D.624 Social assistance benefits in cash				52		52			52
278	9		269	2	71	139	46	11	D.7 Other current transfers	10	49	108	36	36	239	39		278
45	2		43		31	4		8	D.71 Net non-life insurance premiums			45			45			45
45			45				45		D.72 Non-life insurance claims	6		1	35		42	3		45
100	4		96			96			D.73 Current transfers within general government			96			96	4		100
32	1		31			31			D.74 Current international cooperation			1			1	31		32
56	2		54	2	40	8	1	3	D.75 Miscellaneous current transfers	4	4	10	1	36	55	1		56
39			39	35	-24	206	-28	-151	B.6g Disposable income, gross									
3			3	35	-24	176	-28	-156	B.6n Disposable income, net									

Figure 3: Secondary distribution of income account example

