

# Endsemester Report Economic Time Series Data Analysis

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In partial fulfilment of the requirement of the course

**HSS F266: Study Project** 

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Gross domestic product (or GDP) is defined as the total value of goods and services produced within a country's borders in specific time period. GDP is used as a metric to measure a country's economic output and production and is often used as a proxy indicator for the prosperity of a nation.

**Significance of GDP:** GDP is an accurate indication of an economy's size and the GDP growth rate is probably the best indicator of economic growth. According to Nobel laureate Paul A. Samuelson and economist William Nordhaus, "While GDP and the rest of the national income accounts may seem to be arcane concepts, they are truly among the great inventions of the twentieth century."

This statement from Samuelson and Nordhaus is quite valid. GDP enables policymakers and central banks to judge whether the economy is contracting or expanding, whether it needs a boost or restraint, and if a threat such as a recession or inflation looms on the horizon. Having seen the significance of GDP, it leads us into the motivation for this project.

**Motivation and aims:** This project aims to collect and analyse macro-economic time series data for India and the state of Goa. This time series data is GDP data for a) India and b) the state of Goa. A further subdivision of this data is available as the division of the GDP (or SGDP) into the three sectors, namely the Primary, Secondary and Tertiary sectors, which together constitute the total GDP (or SGDP). A further foray is made into the constituents of each of these 3 sectors to identify the subsectors which contribute to each of the sectors.

The objective of this division and subdivision of the GDP data is to identify the major drivers of growth and as mentioned before (in the section "Significance of GDP"), it aids policymakers and central banks to make judgements about the state of the economy. Thus, my analyses and inferences will be able to paint a picture of both, the economy of the state of Goa as well as that of India, identify the major drivers of growth and compare and contrast the economic scenarios of Goa and India.

**Outline:** I have chosen a top down approach wherein I first analysed data at national level. This was done with the idea of extending this abstraction and applying it to the state level. I have divided my project into three parts as follows:

- a) Part I: Methodology; wherein I will be elaborating on the nature of the data along with my methods of computation and mathematical treatment of the data.
- b) Part II: An analysis of the three sectors that constitute GDP.
- c) Part III: Analyses for the state of Goa. Here I extend the methods used in parts I and II.

## Part I: Methodology

This is a preparatory stage wherein I have performed computations and calculations which are applied to data in this and subsequent stages of the project. Keeping the top-down approach in mind, I initiate my work by studying the GDP trends at the national level.

**Objective:** To compute and observe trends in GDP across time using different base years.

Parameter being observed: GDP at factor cost

**Data:** The data source is the <u>RBI website</u> which hosts a database of GDP data released every year. I have chosen data for three base years: 1993-94, 1999-00 and 2004-05. This is because the data corresponding to these base years has been found to be the most consistent and complete.

The dataset obtained from the RBI website was not in semi-processed format, unsuitable for data analysis tools to readily parse. Thus, additional processing was performed on the data to obtain it in a more refined format using a programming language, Python. No data loss was caused due to this.

The GDP data was chosen at constant price to account for inflation. Also, GDP at Factor Cost was used for the computations as opposed to GDP at Market Price as GDP at Market Price would also include taxes into the fray.

This data was subjected to analyses in the following manner:

- 1) Comparisons of absolute GDP values across base years
- 2) Tracking GDP growth as a percentage over time
- 3) Comparisons of proportion contribution to GDP by the three sectors both in terms of absolute values and in terms of percentages.
- 4) Tracking Growth of individual sectors as a percentage over time
- 5) Identifying and comparing the subsectors within each sector contributing to the growth of each individual sector
- 6) Obtaining proportion of contribution to total GDP by subsectors in terms of percentage

The GDP data for the three base years spanned across a range of years from 1950-51 to 2013-14. However, the data for the earlier base years (1993-94 and 1999-00) were available only up to the years 2004-05 and 2008-09 respectively. But as one can observe from Figure 1, we have the entire range of GDP data, from 1950-51 to 2013-14 for all the three base years. This was achieved by a mathematical calculation (elaborated in the following section, "Method") to fill in the missing values.

**Method:** In order to fill in the missing data values for the base years 1993-94 and 1999-00, I have used the following approach, which I shall explain with an example:

Suppose the GDP value for the year 2009-10 corresponding to the base year 1993-94 is missing. Note that we have with us the GDP value for the year 2009-10 corresponding to the base year 2004-05. Thus, we must use the available value to compute the missing value.

In order to do this we compute a constant which is the ratio of the GDP of the base year corresponding to which we have missing data (let's call it year x, in this case it is 1993-94) and the GDP of that same year x corresponding to the base year for which we have the data available (let's call this year y).

Constant 
$$(r) = \frac{GDP \ of \ year \ x \ (Base \ year: x)}{GDP \ of \ year \ x \ (Base \ year: y)}$$

In our example, x=1993-94 and y=2004-05. Thus the constant r will be computed as:

$$r = \frac{GDP \ of \ year \ 1993 - 94 \ (Base \ year: 1993 - 94)}{GDP \ of \ year \ 1993 - 94 \ (Base \ year: 2004 - 05)}$$

Now we take this constant r and multiply it with the available data, i.e. the GDP of the year 2009-10 (with base year 2004-05) to obtain the GDP of the year 2009-10 (with base year 1993-94)

$$GDP \ of \ 2009 - 10 \ (Base \ year: 1993 - 94)$$
  
=  $r \times GDP \ of \ 2009 - 10 \ (Base \ year: 2004 - 05)$ 

Thus, all the requisite values of GDP ranging from 1950-51 to 2013-14 were computed and obtained.

Next, using Python as a programming tool, the GDP trends were obtained as a visual representation for the different base years (as shown in Figure 1).

**Note**: The veracity of the mathematical method described above can be confirmed by computing the growth of GDP as a percentage, which must be the same for all the base years. I have performed this calculation and the results concur (refer Figure 2 on page 4)

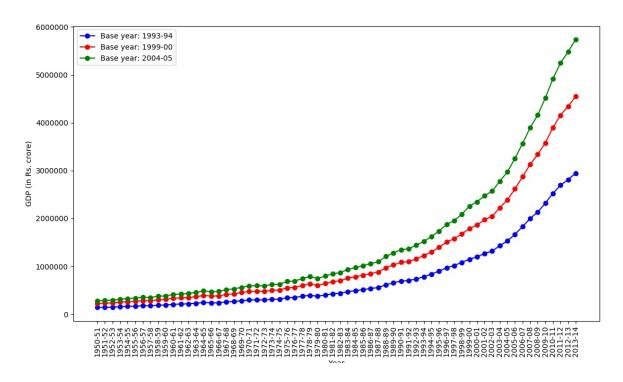


Figure 1: A plot of GDP over time for three different base years

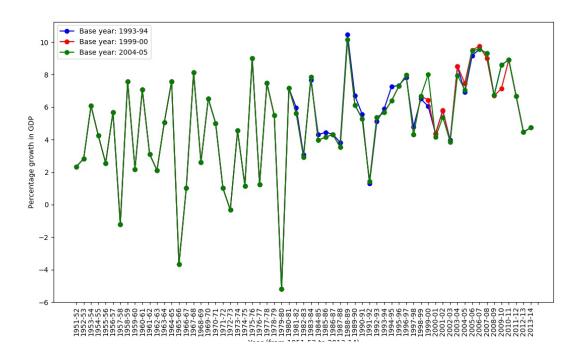


Figure 2: GDP growth as a percentage over time for three different base years

<sup>\*</sup>Note the near 100% coincidence of the three plots (the slight non-coincidence can be attributed to data inconsistencies).

From figures 1 and 2, we can see that post 1991-92, GDP has grown at a much faster rate than before. This is coincident with, and can be attributed to the liberalisation of the economy in 1991. Thus, our data-based analysis is consistent with theory and our observation of reality.

This concludes part I of the project.

## Part II: An analysis of the three sectors

In this stage, I have applied the computational methods discussed in part I to aid and obtain further calculations and computations. Furthermore, in this stage, we follow the next logical step of the top-down approach and we analyse the "components of GDP".

**Objective:** To compute the components of Gross Domestic Product (at Factor Cost) and observe the following:

- a. Share/proportion contribution of each sector to GDP
- b. Rate of growth of each sector

Parameter(s) being observed: The components of GDP, i.e. the three economic sectors

**Data:** Table of "Components of GDP (at factor cost)" hosted on the RBI website. I have chosen two base years: 1993-94 and 1999-2000

The 'Components of GDP (at factor cost)' data contains a breakup of GDP into its component contributors, such as 'Agriculture and Allied Activities', 'Manufacturing', 'Financing, insurance, real estate, and business services', etc (a copy of the original data is appended at the end of this report). Again, these were chosen at constant price to account for inflation.

The 'Components of GDP' are the three sectors, primary, secondary and tertiary sectors. These have further subsectors within them. The division of the components of GDP is as follows:

- 1) GDP
  - a. Primary Sector
    - i. Agriculture
    - ii. Allied activities
    - iii. Mining & Quarrying
  - b. Secondary Sector
    - i. Manufacturing
    - ii. Electricity, Gas & Water
    - iii. Construction
  - c. Tertiary Sector
    - i. Community, social & personal services
    - ii. Trade, hotels, transport & communication
    - iii. Financing, insurance, real estate & business services

**Data pre-processing:** The dataset corresponding to base year = 1993-94 ranges from the year 1970-71 to 2004-05, whereas the dataset corresponding to the base year = 1999-2000 ranges from the year 1950-51 to 2008-09. Thus, to extrapolate the missing values in the

former dataset, the methodology described in part 1 (refer to section "Method" on page 3) was used on each of the components, i.e.

$$r = \frac{\textit{Manufacturing in year } 1993 - 94 \textit{ (Base year: } 1993 - 94)}{\textit{Manufacturing in year } 1993 - 94 \textit{ (Base year: } 1999 - 2000)}$$

and thereafter,

```
Manufacturing in year 1960 - 61 (Base year: 1993 - 94)
= r \times Manufacturing in year 1960 - 61 (Base year: 1999 - 2000)
```

Thus extrapolating the missing value (Manufacturing in year 1960-61 with base year: 1993-94). This was performed for all the components, by calculating constants r for each of the components.

We have already proved that the method of extrapolation is sound when we used it on GDP data. The same logic must hold for any of the subcomponents as well since it is the constituent components that eventually add up to the total GDP. Thus, it is correct to apply the extrapolation to obtain the missing values for each of the individual components of GDP.

Once the dataset was completed, I performed an aggregation of these components into the three major components which are the three economic sectors; the primary, secondary and tertiary sectors, in the following manner, according to the subdivision given in the section "Data" (on page 6):

- a. Primary 'Agriculture and Allied Activities', 'Mining and Quarrying'
- b. Secondary 'Manufacturing', 'Construction', 'Electricity, Gas and Water supply'
- c. Tertiary 'Trade, Hotels, Transport & Communication', 'Financing, Insurance, Real Estate and Business Services', 'Community, Social and Personal services'

#### **Analyses:**

#### 1. Growth rates of the three sectors:

The growth rates of the three sectors were computed as percentages, over time. The calculation for this is simple:

Growth in year 
$$x = \frac{Figure \ in \ year \ x - Figure \ in \ year \ (x - 1)}{Figure \ in \ year \ (x - 1)} \times 100$$

This was computed for data corresponding to both the base years; 1993-94 and 1999-2000.

Now since, the computed values were percentages as opposed to absolute values, similar figures were expected for both the base years, i.e. the growth percentage was expected to be independent of base year. However, this was not found to be the

case with this dataset. There were significant differences in the growth percentages calculated for the two base years. Tables 1 through 5 (refer Appendix 1 on page 19) display the same:

Table 3 gives the element-wise difference of values of Table 2 and Table 1. In essence, it is trying to determine the closeness of the corresponding values in Table 1 and Table 2. From Table 3, we can see that most of the values are very close to zero (they should ideally be equal to zero). However, there are a significant number of values that seem wayward and are far from zero, for example, in the row corresponding to the year 1970-71, we see that all the values are not sufficiently close to zero.

These may have been caused due to inconsistencies in the original datasets across the two base years and this effect may have been propagated and amplified because of the extrapolation at the very first level.

**Possible solution:** Carrying out the extrapolation step after the aggregation of the given components into primary, secondary and tertiary sectors as opposed to extrapolating to find the missing values before aggregation. This would ensure that the data inconsistencies are not propagated from an early stage.

The approach I have chosen to tackle this problem is to take the average of the corresponding elements in Table 1 and Table 2 and the resultant data is as given in the following table:

The rationale behind averaging and obtaining Table 4 is to account for both the base years in the representation of growth of the three sectors and to obtain exactly one representation for the same across the different base years, independent of base years.

Thus, using the data in Table 4, the following representation was obtained:

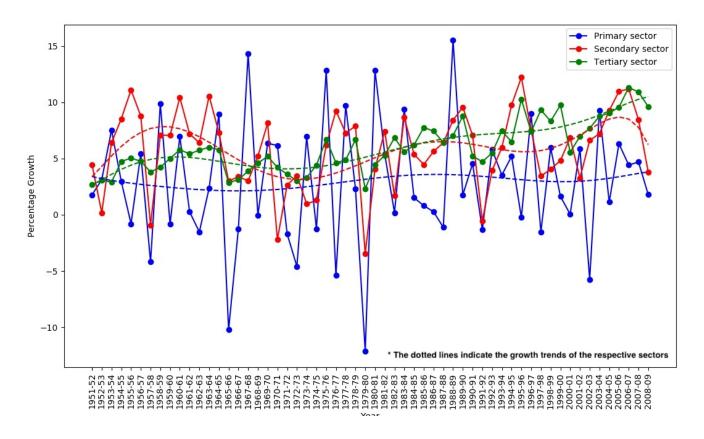


Figure 3: Percentage growths of the three sectors

In the above figure, we look at the dotted lines to identify the overall trends of growth of the individual sectors. Thus, it is abundantly clear from the above figure that the tertiary sector is the fastest growing sector out of the three sectors. We also see the stagnant growth rate of the primary sector caused due to the inelasticity of demand for primary goods, especially in a rapidly developing economy like India.

#### 2. Share/proportion contribution to GDP:

This is simply a measure of the proportion of contribution of the various sectors to the total GDP in a given year. Here, the representation has two dimensions: one, an absolute value in terms of the total GDP in a given year, and two, the relative values of the percentage contribution of the three sectors. Thus in order to ensure both the dimensions, the representation becomes base year dependent (due to the absolute dimension of the total GDP in a given year). The data in Table 5 (refer Appendix - 1) was used:

And the corresponding representation obtained is:

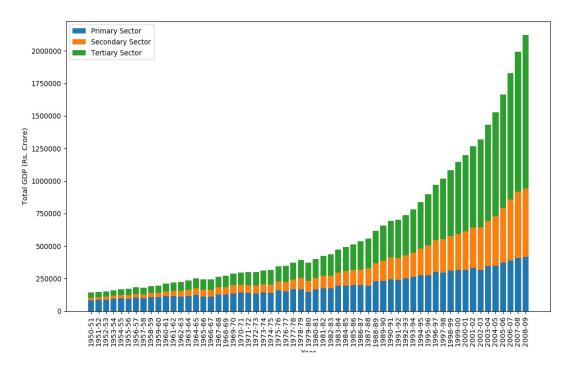


Figure 4: Proportion of contribution of sectors to Total GDP (Base: 1993-94)

The above graph shows the growth of the tertiary sector over the years in terms of the absolute value contributed to GDP. The primary sector has grown too, but its proportion contribution to total GDP has declined, which is consistent with our observation of the ground reality. The percentage contributions of each of the individual sectors to total GDP over time is given in Table 6 in Appendix -1 (refer page 29).

This concludes part II.

## Part III: Analysis for the state of Goa

In the previous stage, we completed analyses at the national level (refer section "Analyses" on page 7). Now, following the top-down approach, we now commence the analyses of SGDP and Components of SGDP datasets for the state of Goa. Note that this is merely an extension of the methods used in stage 2 of the project, thus I will merely furnish the significance of the analyses without elaborating on the specific methodologies.

#### **Objective:**

- 1) To observe the general SGDP growth over time (in absolute as well as percentage terms)
- 2) To compute the components of State Gross Domestic Product (at Factor Cost) and observe the following:
  - a. Share/proportion contribution of each sector to SGDP
  - b. Rate of growth of each sector
  - c. Comparison of proportion of contribution to SGDP of subsectors within each individual sector

#### **Analyses:**

#### 1. SGDP over time:

This involved a simple plotting of points of SGDP for a particular year. This has been done for 4 base years; 1980-81, 1993-94, 1999-2000 & 2004-05. The SGDP data for the base years 1980-81, 1993-94, 1999-00 & 2004-05 spanned from 1980-81 to 1998-99, 1993-94 to 2004-05, 1999-00 to 2007-08 and 2004-05 to 2013-14 respectively. Thus, to obtain the full range of data points (from 1980-81 to 2013-14) for all the 4 base years, the method used in stage 1 (refer section "Method" on page 3) was followed to extrapolate the missing data points. We obtain the following figure:

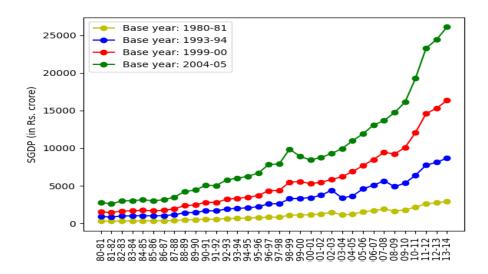


Figure 5: A plot of SGDP over time for four different base years

The upward trend obtained is consistent with our observation of SGDP growth over time. As compared to the all India data (refer Figure 1 on page 4), wherein an increase in the growth rate of GDP was observed at 1991-92 (coinciding with the liberalization of the economy), if we look at Figure 5, we see the acceleration in growth rate of GDP slightly earlier, around 1987-88.

#### 2. SGDP growth rates over time:

Now we look at the SGDP growth rates over time across the four base years in terms of percentage growth. The percentage growth is calculated using the following simple formula:

Growth in year 
$$x = \frac{SGDP \text{ in year } x - SGDP \text{ in year } (x - 1)}{SGDP \text{ in year } (x - 1)} \times 100$$

The following figure is obtained:

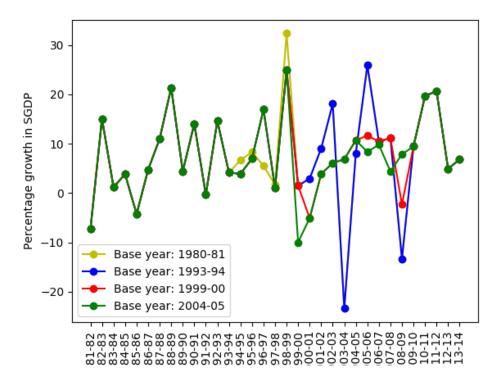


Figure 6: % SGDP growth rate over time

We see that for the most part it is coincident throughout for all the 4 base years (as expected). However, a slightly erratic behaviour is observed corresponding to base year 1993-94 for the period 2000-01 to 2009-10. This may be attributed to certain data inconsistencies. We see that the plot for base year 2004-05 is the most regular one and we can safely take that to be representative of SGDP growth rate.

#### 3. Growth rates of the three sectors:

The growth rates of the three sectors were computed as percentages, over time. The calculation for this is simple:

Growth in year 
$$x = \frac{Figure \ in \ year \ x - Figure \ in \ year \ (x-1)}{Figure \ in \ year \ (x-1)} \times 100$$

This was computed for data corresponding to both the base years; 1993-94 and 1999-2000.

Now since, the computed values were percentages as opposed to absolute values, similar figures were expected for both the base years, i.e. the growth percentage was expected to be independent of base year. As before (refer "Growth rates of the three sectors" on page 7), this was not found to be the case with this dataset. There were significant differences in the growth percentages calculated for the two base years. Thus, the same approach of averaging the values across the base years 1993-94 and 1999-00 was adopted to obtain the following figure:

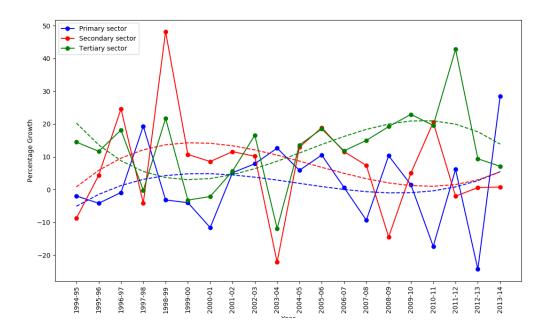


Figure 7: Growth of the three sectors over time

The dotted lines represent the trend lines for the respective sectors. As compared to the all India data, the tertiary sector shows tremendous growth and we see a decline in the growth rate of the secondary sector. But the standout feature is the massive growth rates exhibited by the tertiary sector over time as compared to the primary and secondary sectors.

#### 4. Share/proportion of contribution to SGDP:

Here we calculate and display the contribution of the individual sectors to the total SGDP. As before (refer "Share/Proportion of contribution to GDP" on page 9), the

representation has two dimensions: one, an absolute value in terms of the total GDP in a given year, and two, the relative values of the percentage contribution of the three sectors. Thus in order to ensure both the dimensions, the representation becomes base year dependent (due to the absolute dimension of the total GDP in a given year). I have computed the same for the base year 1993-94 and obtained the following figure:

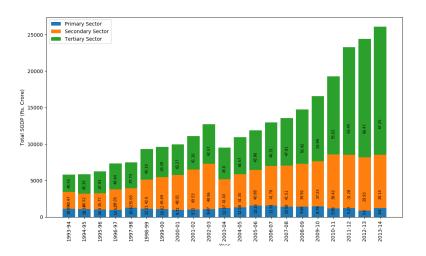


Figure 8: Proportion of contribution of sectors to Total GDP (Base: 2004-05)
(Refer to Table 7 in Appendix – 1 on page 31 for data of percentage contribution of each of the three sectors to total SGDP of Goa over time)

Of course the height of the individual stacks represent the proportion of the respective sectors and this proportion has been numerically represented as a percentage embedded within the respective bars. It is evident that the tertiary sector emerges as the biggest contributor to the SGDP. On the other hand, the percentage contribution to total SGDP by the primary sector shows a declining trend, much like the pattern observed at the national level. The reason for this major contribution by the tertiary sector can be understood by examining its constituent components. Thus, in the next section, we make a foray into the constituent subsectors of each of the three sectors.

#### 5. Growth and contribution of the subsectors to total SGDP:

Here we simply plot the absolute values of the domestic products produced by the different subsectors. This is done for all the three sectors.

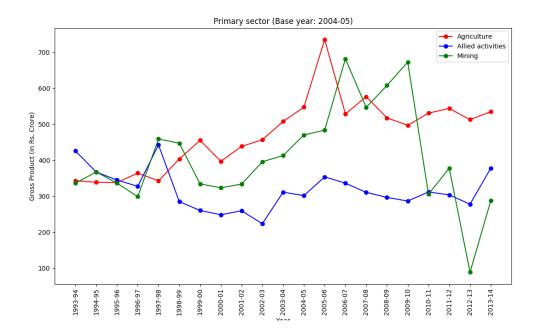


Figure 9.1: Growth of subsectors within primary sector (Base: 2004-05)

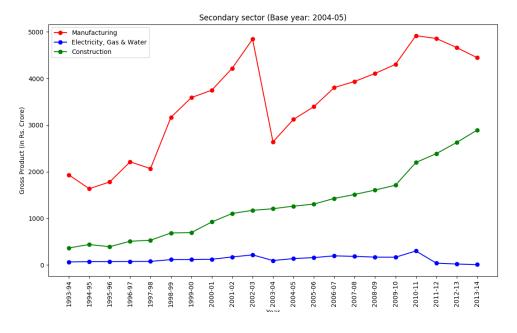


Figure 9.2: Growth of subsectors within secondary sector (Base: 2004-05)

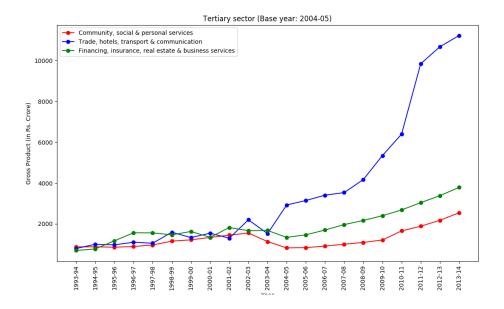


Figure 9.3: Growth of subsectors within tertiary sector (Base: 2004-05)

Figure 9.3 clearly displays the major driver of growth in the tertiary sector (and therefore, the major contributor to the total SGDP). "Trade, hotels, transport & communication" accrue the majority of the SGDP in Goa. And this is unsurprising, given that Goa is a major source of tourism with large intra and international influxes every year.

#### 6. Share/Proportion of Contribution of subsectors to total SGDP:

We will now take each of the three sectors and break them down into their constituent subsectors and observe the proportion of contribution of each of the subsectors to the total SGDP. The following figures are obtained:

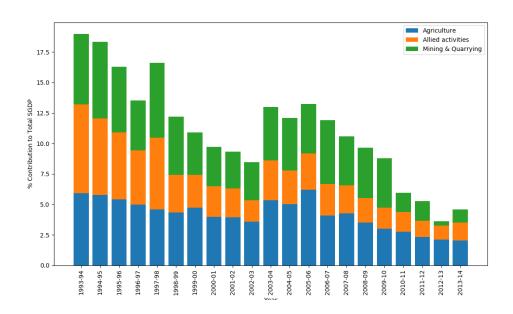


Figure 10.1: % contribution to total SGDP of subsectors of primary sector (Base: 2004-05)

(Refer to Table 8 in Appendix – 1 on page 32 for data of percentage contributions of each of the subsectors of the primary sector to the total SGDP of Goa)

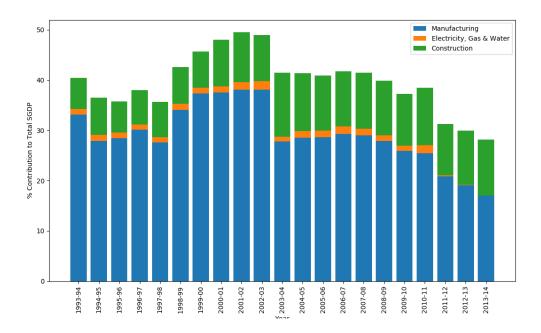


Figure 10.2: % contribution to total SGDP of subsectors of secondary sector (Base: 2004-05) (Refer to Table 8 in Appendix – 1 on page 33 for data of percentage contributions of each of the subsectors of the secondary sector to the total SGDP of Goa)

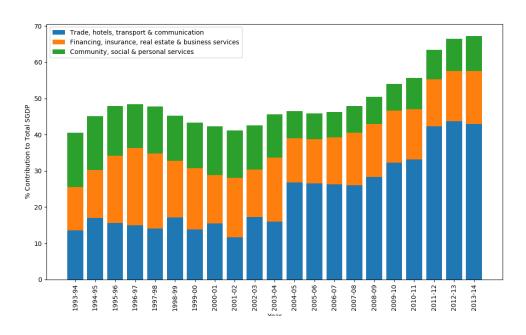


Figure 10.3: % contribution to total SGDP of subsectors of tertiary sector (Base: 2004-05)

(Refer to Table 8 in Appendix – 1 on page 34 for data of percentage contributions of each of the subsectors of the tertiary sector to the total SGDP of Goa)

Figures 9.1, 9.2 and 9.3 coupled with 10.1, 10.2 and 10.3 presents a vivid picture of the major drivers of growth within each sector. Additionally, the total height of the each bar in figures 10.1, 10.2 and 10.3 gives the percentage contribution of the sector to the total SGDP in that particular year. Figure 10.3 again clearly presents that "Trade, hotels, transport & communication" is the most rapidly growing subsector within the Goan economy.

This concludes part III of the project.

#### **Conclusion**

Thus, I have extensively analysed macro-economic data at the national level and have identified the major drivers of growth within each sector as well as trends in GDP which are consistent with theory. This model was later extended to be used on the macroeconomic data for the state of Goa. Trade, hotels, transport & communication turned out to be the single major contributor to Goa's SGDP which just goes on to highlight the importance of tourism in Goa at an economic level. At the national level (and also at the state level) we observed the rapid growth of the tertiary sector which has become the norm in developed and developing economies across the world due to the advent of consumerism.

Thus, the top-down approach was a successful one which yielded satisfactory results at both the national as well as the state level and it was found that the economic scenarios of Goa and India had a lot of similarities. This is consistent with our logic that the parts reflect the whole, in that Goa's economy contributes to and is a part of the national economy. However, a few peculiarities were also observed specific to the Goan economy. One of the most striking ones was the large "Trade, hotels, transport & communication" subsector, which characterised and highlighted the significance of tourism in Goa.

Online Github repository which contains my Python code and data: <a href="https://github.com/raghavprasad13/economic-time-series">https://github.com/raghavprasad13/economic-time-series</a>

## Appendix - 1

Table 1: Growth percentage (Base year: 1993-94)

Year	Primary sector	Secondary sector	Tertiary sector
1951-52	1.761267894387544	4.3740082969529785	2.69934582489642
1952-53	3.1300255806492205	0.41934395099699273	3.094611017159996
1953-54	7.532395413816596	6.501694495468062	2.921254209548846
1954-55	2.9741517442209764	8.426152096690323	4.787366510145633
1955-56	-0.8002153306852368	10.874842846163094	5.110528220875015
1956-57	5.4262049375962444	8.692163195458697	4.815783514321973
1957-58	-4.199965640320964	-0.585174269242704	3.795786890132734
1958-59	9.870722891318888	6.935654136989186	4.244442043404387
1959-60	-0.8359015518496424	7.065225875756334	5.053835824024255
1960-61	6.97622238543172	10.280471601813874	5.840869975017533
1961-62	0.2639402793087826	7.301224538162159	5.453517182824089
1962-63	-1.5280565011194818	6.476118918644801	5.7320187535311105
1963-64	2.3628253220055733	10.50496138434306	6.017730979273279
1964-65	8.927912757273692	7.30328008825981	5.794789466613624
1965-66	-10.233994486843892	2.866523565069399	2.8253158150040907
1966-67	-1.2555991792784822	3.218565419451428	3.086449083296325
1967-68	14.329198925814811	2.8728516693560318	3.8998263006184355
1968-69	-0.03504920200895378	5.25862204471442	4.595734782529058
1969-70	6.364385313177078	8.326728115086347	5.1950610253423335
1970-71	5.815399188713124	-6.113627627245597	3.4943088956016637
1971-72	-1.7106066025627538	2.686577283590691	3.5581290451164893
1972-73	-4.597479699162278	3.494437291604767	2.990184658083729
1973-74	6.947695943873926	1.0590280546739181	3.344971723629211
1974-75	-1.2609449744034464	1.3477897195524202	4.492938444554418
1975-76	12.856889896235435	6.1167603594063875	6.803464575534851
1976-77	-5.379164914614935	9.249394673123486	4.609992581033027
1977-78	9.713065279970285	7.225177304964539	4.949744442542368
1978-79	2.320295024484614	8.03237000012527	6.7458930443900735
1979-80	-12.16262525997353	-3.4381196442444835	2.1872953503601833
1980-81	12.852559143835386	4.000048034200351	4.498134381497622
1981-82	5.704833998927103	7.41758558974655	5.41658432877011
1982-83	-0.02311930123321736	2.8657730385148716	6.710966891184341
1983-84	9.14156796390299	8.670254454255709	5.547478859247414
1984-85	1.4702234532939207	6.233171782444804	6.317650164713444
1985-86	1.0185736912601284	4.720567735394753	7.934143049932524
1986-87	0.19510670370501076	6.18727796073957	7.362914357733011
1987-88	-1.008855791486364	6.976157333919428	6.501141286625985
1988-89	15.43192619513559	8.61456280389904	7.277824919300517
1989-90	1.8908386358132059	10.677605122672308	8.847165310990153
1990-91	4.590970184408075	7.42123953183651	5.316072579074333

1991-92	-1.14002611440755	-1.022963648256071	4.7969810354394005
1992-93	5.4135162359510645	4.291319128162079	5.351561041667374
1993-94	3.907139033722567	5.648637077208505	7.6688648275995375
1994-95	5.338492476884976	10.278273085859405	7.083443042822606
1995-96	-0.32458005643925536	12.252317582266821	10.45628545083685
1996-97	8.834357611946809	7.747776060899703	7.199629659610636
1997-98	-1.4726458537171785	3.756562743064558	9.82837509704488
1998-99	5.908808985565208	3.839591443106969	8.35455059161236
1999-00	0.5654671424228364	4.9297813539884565	10.061728272659312
2000-01	0.10596591270699948	6.953910544459017	5.492488050604541
2001-02	5.9408426975221325	3.713916213246134	6.759459297907042
2002-03	-5.609798544140857	6.349396072451924	7.911836880952914
2003-04	9.291177386848412	6.632200527319782	9.061152849510504
2004-05	1.475832300774274	7.980150749474428	8.940105695830887
2005-06	6.882406182753165	11.31557696114016	8.574386925571625
2006-07	4.425355081755942	11.207800552907326	11.41594379638892
2007-08	4.696579030326201	8.44219599731769	10.99793796559144
2008-09	1.8027109607668952	3.7061266780051567	9.574816435603717

Table 2: Growth Percentage (Base year: 1999-2000)

Year	Primary sector	Secondary sector	Tertiary sector
1951-52	1.7629188899907131	4.539813181788491	2.708603089523924
1952-53	3.1298819817172205	-0.046863284178955265	3.057888796047906
1953-54	7.531365064604908	6.3076297940174415	2.9017253886747367
1954-55	2.974363981254184	8.64720237570198	4.698450437499136
1955-56	-0.7998266252192582	11.341740636501408	4.978743629690265
1956-57	5.426144897457604	8.866635879736528	4.702375712147699
1957-58	-4.198181629798476	-1.281507445692215	3.8341421227117665
1958-59	9.869474993409536	7.223466087703824	4.21081856461987
1959-60	-0.8348611435813512	7.0785260804454655	4.990897384663203
1960-61	6.977696435772559	10.587586424251974	5.72319729329668
1961-62	0.2650320126194674	7.092729151081187	5.3933775364275505
1962-63	-1.525256089167038	6.333577273634488	5.763573909247908
1963-64	2.362967835913822	10.631608584120627	5.997667324600753
1964-65	8.9261225075312	7.35341938950077	5.787803123280715
1965-66	-10.229098513941349	3.121295930462268	2.8899930390533113
1966-67	-1.2545991209590819	3.5466155810983397	3.1486449706442707
1967-68	14.325954538701529	3.1846269595569647	3.883326799553693
1968-69	-0.034306743874167024	5.17935906477486	4.592329184658369
1969-70	6.364005074980761	7.990499136285117	5.196949827577833
1970-71	6.5053408618708914	1.70379802784589	4.929656427878876
1971-72	-1.7111749639680165	2.616874650772956	3.66969016952988
1972-73	-4.59852242054041	3.4606891127446535	3.05654085190238
1973-74	6.948557666420281	0.872294182431313	3.270654130826165
1974-75	-1.2614311476460303	1.2319078629538733	4.346389403218915
1975-76	12.857050146945662	6.264018401687458	6.6179280823787625
1976-77	-5.380305756134428	9.25307178271179	4.633465625400077
1977-78	9.713799525097347	7.301172331014979	4.811010018451178
1978-79	2.320566590171718	7.775879373884262	6.622835075856981
1979-80	-12.164497979544093	-3.4933318167600307	2.4345701072104267
1980-81	12.852910229939202	4.17298937784522	4.388293892558627
1981-82	5.058476566461992	7.4593937165444535	5.158933318042751
1982-83	0.3828316172129413	0.5040534849441988	7.02303752604623
1983-84	9.681882074424799	8.655571123652887	5.609799590228068
1984-85	1.5614777042567973	4.526555551538379	6.0895514159102975
1985-86	0.6063544350875328	4.224458971786978	7.604084787932726
1986-87	0.3439284417599102	5.08423952122305	7.52584632567125
1987-88	-1.23087246556057	5.828324192308907	6.378415404093572
1988-89	15.676890798281546	8.227933094265863	6.813251772057698
1989-90	1.6398775849808402	8.462697953143813	8.738103944104596
1990-91	4.494687555765794	6.716041641068228	5.151502758313566
1991-92	-1.5350752357640272	-0.09330284117077199	4.623625477261088
1992-93	6.177940998337206	3.5905465499358193	5.674366732411528

1993-94	3.1712407793925097	6.320683781668636	7.248226395919246
1994-95	5.06840639733009	9.282899864330457	5.897510191213962
1995-96	-0.1691047732034711	12.207837660257997	10.089482378854624
1996-97	9.12388559982941	7.321278818284806	7.572309269842063
1997-98	-1.5847783988863957	3.1105542242669837	8.828153607402541
1998-99	6.014858111725861	4.280840585953184	8.289994939588837
1999-00	2.7163242501594063	4.711477165514955	9.460950706439517
2000-01	-0.02397005586866868	6.751540861128902	5.650781564164633
2001-02	5.859112444466303	2.817470093892858	7.181932261974952
2002-03	-5.894491505737692	6.8856037965668495	7.469916910292361
2003-04	9.291265371276232	7.797275810676729	8.491346675379537
2004-05	0.790322641360281	10.542592071970763	9.133853296636733
2005-06	5.747328202935195	10.652148162599813	10.585172706272305
2006-07	4.428037112513642	11.18615037553741	11.231867665771244
2007-08	4.6956724663610405	8.506258141247097	10.851828360722624
2008-09	1.8038477131287745	3.895959851662017	9.668004022386853

Table 3: Element wise difference of the contents of Table 1 and Table 2

Year	Primary sector	Secondary sector	Tertiary sector
1951-52	0.0016509956031691697	0.16580488483551203	0.009257264627503758
1952-53	-0.0001435989319999997	-0.466207235175948	-0.036722221112090114
1953-54	-0.0010303492116880975	-0.19406470145062027	-0.019528820874109343
1954-55	0.0002122370332076073	0.22105027901165641	-0.08891607264649704
1955-56	0.0003887054659785782	0.46689779033831336	-0.13178459118474972
1956-57	-6.00401386403603e-05	0.17447268427783058	-0.11340780217427415
1957-58	0.0017840105224875558	-0.6963331764495111	0.038355232579032617
1958-59	-0.001247897909351536	0.28781195071463817	-0.033623478784517324
1959-60	0.0010404082682912152	0.013300204689131512	-0.06293843936105237
1960-61	0.0014740503408390282	0.3071148224381002	-0.11767268172085288
1961-62	0.0010917333106847948	-0.20849538708097182	-0.06013964639653846
1962-63	0.0028004119524438487	-0.1425416450103123	0.03155515571679768
1963-64	0.0001425139082487092	0.1266471997775671	-0.020063654672525466
1964-65	-0.001790249742491312	0.05013930124095989	-0.006986343332909151
1965-66	0.004895972902543733	0.25477236539286885	0.0646772240492206
1966-67	0.0010000583194003099	0.3280501616469116	0.06219588734794579
1967-68	-0.003244387113282343	0.311775290200933	-0.016499501064742628
1968-69	0.0007424581347867526	-0.07926297993955966	-0.003405597870688837
1969-70	-0.000380238196316717	-0.3362289788012296	0.001888802235499476
1970-71	0.6899416731577679	7.817425655091487	1.4353475322772122
1971-72	-0.000568361405262729	-0.06970263281773503	0.11156112441339072
1972-73	-0.001042721378131439	-0.0337481788601135	0.06635619381865077
1973-74	0.0008617225463547484	-0.18673387224260518	-0.07431759280304595
1974-75	-0.000486173242583820	-0.11588185659854688	-0.1465490413355024
1975-76	0.0001602507102269612	0.1472580422810701	-0.18553649315608833
1976-77	-0.001140841519492674	0.0036771095883043614	0.023473044367049667
1977-78	0.0007342451270613282	0.07599502605043984	-0.13873442409119008
1978-79	0.0002715656871039584	-0.2564906262410087	-0.12305796853309214
1979-80	-0.001872719570563674	-0.05521217251554722	0.24727475685024336
1980-81	0.0003510861038158452	0.17294134364486968	-0.10984048893899523
1981-82	-0.6463574324651109	0.041808126797903356	-0.2576510107273595
1982-83	0.40595091844615866	-2.3617195535706728	0.3120706348618887
1983-84	0.540314110521809	-0.014683330602821343	0.06232073098065438
1984-85	0.09125425096287665	-1.706616230906425	-0.22809874880314673
1985-86	-0.4122192561725956	-0.4961087636077748	-0.33005826199979804
1986-87	0.14882173805489946	-1.1030384395165198	0.1629319679382384
1987-88	-0.222016674074206	-1.147833141610521	-0.12272588253241246
1988-89	0.2449646031459558	-0.38662970963317633	-0.4645731472428194
1989-90	-0.25096105083236564	-2.2149071695284945	-0.10906136688555712
1990-91	-0.09628262864228088	-0.7051978907682814	-0.1645698207607662
1991-92	-0.3950491213564771	0.9296608070852989	-0.17335555817831239
1992-93	0.7644247623861418	-0.7007725782262595	0.3228056907441541

1993-94	-0.7358982543300572	0.672046704460131	-0.4206384316802918
1994-95	-0.2700860795548863	-0.9953732215289488	-1.1859328516086443
1995-96	0.15547528323578427	-0.04447992200882389	-0.3668030719822255
1996-97	0.28952798788260203	-0.4264972426148974	0.3726796102314269
1997-98	-0.11213254516921722	-0.6460085187975744	-1.000221489642339
1998-99	0.1060491261606531	0.4412491428462153	-0.06455565202352354
1999-00	2.15085710773657	-0.21830418847350153	-0.6007775662197954
2000-01	-0.12993596857566816	-0.20236968333011518	0.1582935135600918
2001-02	-0.08173025305582904	-0.8964461193532758	0.4224729640679099
2002-03	-0.28469296159683477	0.5362077241149255	-0.4419199706605532
2003-04	8.798442781987603e-05	1.1650752833569475	-0.5698061741309672
2004-05	-0.685509659413993	2.5624413224963343	0.19374760080584608
2005-06	-1.1350779798179698	-0.6634287985403464	2.0107857807006795
2006-07	0.0026820307576995717	-0.02165017736991537	-0.18407613061767591
2007-08	-0.000906563965160422	0.0640621439294069	-0.14610960486881552
2008-09	0.0011367523618792674	0.18983317365686014	0.09318758678313621
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Table 4: Average growth percentage across base years 1993-94 and 1999-2000

Year	Primary sector	Secondary sector	Tertiary sector
1951-52	1.7620933921891284	4.456910739370734	2.703974457210172
1952-53	3.1299537811832208	0.18624033340901874	3.076249906603951
1953-54	7.531880239210752	6.404662144742751	2.9114897991117914
1954-55	2.97425786273758	8.536677236196152	4.742908473822384
1955-56	-0.8000209779522475	11.108291741332252	5.044635925282639
1956-57	5.426174917526924	8.779399537597612	4.759079613234836
1957-58	-4.199073635059721	-0.9333408574674595	3.81496450642225
1958-59	9.870098942364212	7.079560112346504	4.227630304012129
1959-60	-0.8353813477154968	7.0718759781009	5.022366604343729
1960-61	6.97695941060214	10.434029013032923	5.782033634157107
1961-62	0.264486145964125	7.196976844621673	5.42344735962582
1962-63	-1.5266562951432598	6.404848096139645	5.747796331389509
1963-64	2.3628965789596976	10.568284984231845	6.007699151937016
1964-65	8.927017632402446	7.32834973888029	5.79129629494717
1965-66	-10.231546500392621	2.9939097477658336	2.857654427028701
1966-67	-1.255099150118782	3.382590500274884	3.117547026970298
1967-68	14.32757673225817	3.028739314456498	3.8915765500860644
1968-69	-0.0346779729415604	5.218990554744639	4.594031983593713
1969-70	6.364195194078919	8.158613625685732	5.196005426460083
1970-71	6.160370025292007	-2.2049147996998535	4.21198266174027
1971-72	-1.710890783265385	2.6517259671818234	3.6139096073231847
1972-73	-4.598001059851343	3.4775632021747103	3.0233627549930544
1973-74	6.948126805147103	0.9656611185526156	3.3078129272276877
1974-75	-1.2611880610247383	1.2898487912531467	4.419663923886667
1975-76	12.856970021590548	6.190389380546923	6.710696328956807
1976-77	-5.379735335374681	9.251233227917638	4.621729103216552
1977-78	9.713432402533815	7.263174817989759	4.880377230496773
1978-79	2.320430807328166	7.904124687004766	6.684364060123528
1979-80	-12.163561619758811	-3.465725730502257	2.310932728785305
1980-81	12.852734686887294	4.086518706022785	4.443214137028125
1981-82	5.381655282694547	7.438489653145502	5.28775882340643
1982-83	0.17985615798986196	1.6849132617295353	6.867002208615286
1983-84	9.411725019163894	8.662912788954298	5.57863922473774
1984-85	1.5158505787753591	5.379863666991591	6.203600790311871
1985-86	0.8124640631738307	4.472513353590866	7.769113918932625
1986-87	0.26951757273246046	5.635758740981309	7.44438034170213
1987-88	-1.1198641285234672	6.402240763114167	6.4397783453597786
1988-89	15.554408496708568	8.421247949082451	7.045538345679107
1989-90	1.765358110397023	9.57015153790806	8.792634627547375
1990-91	4.542828870086934	7.06864058645237	5.2337876686939495
1991-92	-1.3375506750857886	-0.5581332447134214	4.710303256350244
1992-93	5.795728617144135	3.940932839048949	5.512963887039451
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1993-94	3.5391899065575383	5.984660429438571	7.458545611759392
1994-95	5.203449437107533	9.780586475094932	6.490476617018284
1995-96	-0.2468424148213632	12.23007762126241	10.272883914845737
1996-97	8.97912160588811	7.534527439592255	7.385969464726349
1997-98	-1.528712126301787	3.433558483665771	9.32826435222371
1998-99	5.961833548645535	4.060216014530076	8.322272765600598
1999-00	1.6408956962911212	4.820629259751706	9.761339489549414
2000-01	0.0409979284191654	6.852725702793959	5.571634807384587
2001-02	5.899977570994218	3.265693153569496	6.970695779940996
2002-03	-5.752145024939274	6.617499934509387	7.690876895622638
2003-04	9.291221379062321	7.214738168998256	8.77624976244502
2004-05	1.1330774710672775	9.261371410722596	9.03697949623381
2005-06	6.31486719284418	10.983862561869987	9.579779815921965
2006-07	4.426696097134792	11.19697546422237	11.323905731080082
2007-08	4.69612574834362	8.474227069282392	10.924883163157032
2008-09	1.8032793369478348	3.801043264833587	9.621410228995284
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Table 5: Three-sector division of GDP for base year: 1993-94

Year	Primary sector	Secondary sector	Tertiary sector
1950-51	83707.558270422	20342.17772152632	40159.93788228863
1951-52	85181.87261941469	21231.946262846803	41243.99348879518
1952-53	87848.0870224784	21320.981145178983	42520.33465521619
1953-54	94465.15230048518	22707.206202674868	43762.46172124595
1954-55	97274.68927531106	24620.54993422135	45857.53115770418
1955-56	96496.28229885359	27297.996047429035	48201.093228915204
1956-57	101732.3683335508	29670.78241296143	50522.35353035627
1957-58	97459.6438184569	29497.15662879779	52440.07440224804
1958-59	107079.61519064318	31542.977392817185	54665.8629677696
1959-60	106184.53502554997	33771.559993558476	57428.58593394675
1960-61	113592.20432786897	37243.43562818579	60782.91496683979
1961-62	113892.01990924495	39962.66248912552	64097.72167877775
1962-63	112151.68549476544	42550.69203497795	67771.81510599147
1963-64	114801.6339186918	47020.62580202312	71850.14061884052
1964-65	125051.02363887733	50454.67380359743	76013.70499916817
1965-66	112253.30877393277	51900.968917856444	78161.33222808022
1966-67	110843.85715025433	53571.435555806805	80573.741950126
1967-68	126726.89393836028	55110.46343646979	83715.97793008944
1968-69	126682.47717330416	58008.51441568427	87563.34224635691
1969-70	134745.03814489083	62838.72569467897	92112.31131188452
1970-71	142581.0	58997.0	95331.0
1971-72	140142.0	60582.0	98723.0
1972-73	133699.0	62699.0	101675.0
1973-74	142988.0	63363.0	105076.0
1974-75	141185.0	64217.0	109797.0
1975-76	159337.0	68145.0	117267.0
1976-77	150766.0	74448.0	122673.0
1977-78	165410.0	79827.0	128745.0
1978-79	169248.0	86239.0	137430.0
1979-80	148663.0	83274.0	140436.0
1980-81	167770.0	86605.0	146753.0
1981-82	177341.0	93029.0	154702.0
1982-83	177300.0	95695.0	165084.0
1983-84	193508.0	103992.0	174242.0
1984-85	196353.0	110474.0	185250.0
1985-86	198353.0	115689.0	199948.0
1986-87	198740.0	122847.0	214670.0
1987-88	196735.0	131417.0	228626.0
1988-89	227095.0	142738.0	245265.0
1989-90	231389.0	157979.0	266964.0
1990-91	242012.0	169703.0	281156.0
1991-92	239253.0	167967.0	294643.0

1992-93	252205.0	175175.0	310411.0
1993-94	262059.0	185070.0	334216.0
1994-95	276049.0	204092.0	357890.0
1995-96	275153.0	229098.0	395312.0
1996-97	299461.0	246848.0	423773.0
1997-98	295051.0	256121.0	465423.0
1998-99	312485.0	265955.0	504307.0
1999-00	314252.0	279066.0	555049.0
2000-01	314585.0	298472.0	585535.0
2001-02	333274.0	309557.0	625114.0
2002-03	314578.0	329212.0	674572.0
2003-04	343806.0	351046.0	735696.0
2004-05	348880.0	379060.0	801468.0
2005-06	372891.33869038924	421952.8260288979	870188.9674046404
2006-07	389393.10449655214	469244.4571975728	969529.2508459312
2007-08	407681.2593878734	508858.9939807414	1076157.4764122302
2008-09	415030.5741358511	527717.9529100903	1179197.5793367266
	·	·	· · · · · · · · · · · · · · · · · · ·

<sup>\*</sup>All GDP figures in Rs. Crore

\*\* The figures with extra decimals are a result of extrapolation and are thus different

from those obtained from raw data

Table 6: Percentage contribution of each of the three sectors to total GDP over time (Base: 1993-94)

Year	% Primary	% Secondary	% Tertiary
1950-51	58.05	14.11	27.85
1951-52	57.69	14.38	27.93
1952-53	57.91	14.06	28.03
1953-54	58.7	14.11	27.19
1954-55	57.99	14.68	27.34
1955-56	56.1	15.87	28.02
1956-57	55.92	16.31	27.77
1957-58	54.33	16.44	29.23
1958-59	55.4	16.32	28.28
1959-60	53.8	17.11	29.09
1960-61	53.68	17.6	28.72
1961-62	52.26	18.34	29.41
1962-63	50.41	19.13	30.46
1963-64	49.13	20.12	30.75
1964-65	49.72	20.06	30.22
1965-66	46.33	21.42	32.26
1966-67	45.24	21.87	32.89
1967-68	47.72	20.75	31.53
1968-69	46.53	21.31	32.16
1969-70	46.51	21.69	31.8
1970-71	48.02	19.87	32.11
1971-72	46.8	20.23	32.97
1972-73	44.85	21.03	34.11
1973-74	45.91	20.35	33.74
1974-75	44.79	20.37	34.83
1975-76	46.22	19.77	34.02
1976-77	43.34	21.4	35.26
1977-78	44.23	21.35	34.43
1978-79	43.07	21.95	34.98
1979-80	39.92	22.36	37.71
1980-81	41.82	21.59	36.59
1981-82	41.72	21.89	36.39
1982-83	40.47	21.84	37.68
1983-84	41.02	22.04	36.94
1984-85	39.9	22.45	37.65
1985-86	38.59	22.51	38.9
1986-87	37.06	22.91	40.03
1			

1987-88	35.33	23.6	41.06
1988-89	36.92	23.21	39.87
1989-90	35.25	24.07	40.68
1990-91	34.93	24.49	40.58
1991-92	34.09	23.93	41.98
1992-93	34.18	23.74	42.07
1993-94	33.54	23.69	42.77
1994-95	32.94	24.35	42.71
1995-96	30.59	25.47	43.94
1996-97	30.87	25.45	43.68
1997-98	29.02	25.19	45.78
1998-99	28.86	24.56	46.58
1999-00	27.37	24.3	48.33
2000-01	26.25	24.9	48.85
2001-02	26.28	24.41	49.3
2002-03	23.86	24.97	51.17
2003-04	24.03	24.54	51.43
2004-05	23.19	25.13	51.68
2005-06	22.4	25.34	52.26
2006-07	21.3	25.67	53.03
2007-08	20.46	25.54	54.01

Table 7: Percentage contribution of each of the three sectors to total SGDP of Goa over time (Base: 2004-05)

Year	% Primary	% Secondary	% Tertiary
1993-94	18.99	40.47	40.55
1994-95	18.34	36.52	45.15
1995-96	16.3	35.77	47.93
1996-97	13.52	38.05	48.44
1997-98	16.62	35.65	47.73
1998-99	12.21	42.6	45.19
1999-00	10.92	45.69	43.39
2000-01	9.72	48.01	42.27
2001-02	9.31	49.53	41.16
2002-03	8.47	48.96	42.57
2003-04	12.97	41.43	45.6
2004-05	12.08	41.35	46.57
2005-06	13.25	40.88	45.86
2006-07	11.91	41.78	46.31
2007-08	10.58	41.51	47.91
2008-09	9.66	39.92	50.42
2009-10	8.78	37.23	53.99
2010-11	5.96	38.42	55.62
2011-12	5.27	31.28	63.45
2012-13	3.6	29.93	66.47
2013-14	4.6	28.14	67.25

Table 8: Percentage contributions of each of the subsectors of the primary sector to the total SGDP of Goa (Base: 2004-05)

Year	% Agriculture	% Allied Activities	% Mining & Quarrying	% Primary
1993-94	5.90	7.31	5.78	18.99
1994-95	5.79	6.27	6.28	18.34
1995-96	5.40	5.52	5.38	16.3
1996-97	4.97	4.47	4.08	13.52
1997-98	4.58	5.91	6.13	16.62
1998-99	4.34	3.06	4.81	12.21
1999-00	4.73	2.71	3.48	10.92
2000-01	3.98	2.49	3.25	9.72
2001-02	3.96	2.34	3.01	9.31
2002-03	3.59	1.76	3.11	8.47
2003-04	5.34	3.28	4.35	12.97
2004-05	5.01	2.76	4.31	12.08
2005-06	6.19	2.98	4.07	13.25
2006-07	4.07	2.59	5.25	11.91
2007-08	4.25	2.29	4.03	10.58
2008-09	3.52	2.02	4.13	9.66
2009-10	3.00	1.73	4.05	8.78
2010-11	2.75	1.62	1.59	5.96
2011-12	2.34	1.31	1.62	5.27
2012-13	2.10	1.14	0.36	3.6
2013-14	2.05	1.45	1.10	4.6

Table 9: Percentage contributions of each of the subsectors of the secondary sector to the total SGDP of Goa (Base: 2004-05)

Year	% Manu.	% E, G & W supply	% Construction	% Secondary
1993-94	33.16	1.08	6.23	40.47
1994-95	27.90	1.17	7.45	36.52
1995-96	28.44	1.10	6.23	35.77
1996-97	30.15	0.98	6.91	38.05
1997-98	27.60	0.99	7.06	35.65
1998-99	34.03	1.22	7.36	42.6
1999-00	37.30	1.20	7.19	45.69
2000-01	37.58	1.20	9.23	48.01
2001-02	38.06	1.53	9.94	49.53
2002-03	38.08	1.68	9.20	48.96
2003-04	27.78	0.97	12.68	41.43
2004-05	28.57	1.24	11.54	41.35
2005-06	28.60	1.31	10.98	40.88
2006-07	29.31	1.49	10.98	41.78
2007-08	29.02	1.34	11.14	41.51
2008-09	27.89	1.13	10.90	39.92
2009-10	25.94	0.99	10.30	37.23
2010-11	25.49	1.54	11.39	38.42
2011-12	20.87	0.16	10.25	31.28
2012-13	19.10	0.07	10.76	29.93
2013-14	17.04	0.02	11.08	28.14

<sup>\*</sup> E, G & W supply = Electricity, Gas & Water supply

Table 10: Percentage contributions of each of the subsectors of the tertiary sector to the total SGDP of Goa (Base: 2004-05)

Year	%Thtr&c	% F, i, real e & b services	% C, s & p services	% Tertiary
1993-94	13.56	11.95	15.03	40.55
1994-95	17.05	13.18	14.92	45.15
1995-96	15.55	18.68	13.70	47.93
1996-97	14.99	21.31	12.14	48.44
1997-98	14.04	20.81	12.88	47.73
1998-99	17.09	15.70	12.40	45.19
1999-00	13.81	16.93	12.65	43.39
2000-01	15.47	13.42	13.38	42.27
2001-02	11.70	16.42	13.04	41.16
2002-03	17.28	13.10	12.19	42.57
2003-04	16.04	17.64	11.91	45.6
2004-05	26.80	12.24	7.53	46.57
2005-06	26.48	12.33	7.05	45.86
2006-07	26.23	13.07	7.01	46.31
2007-08	26.04	14.47	7.40	47.91
2008-09	28.31	14.70	7.41	50.42
2009-10	32.23	14.48	7.29	53.99
2010-11	33.15	13.90	8.58	55.62
2011-12	42.29	13.06	8.10	63.45
2012-13	43.72	13.85	8.91	66.47
2013-14	43.01	14.51	9.73	67.25

<sup>\*</sup> T, h, tr & c = Trade, hotels, transport & communication

F, i, real e & b services = Finance, insurance, real estate & business services

C, s & p services = Community, social & personal services

### Appendix – 2

1. A copy of the original <u>Components of GDP</u> data for base year 1999-2000, as sample raw data (this data was used to obtain Figure 3 and Figure 4)

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TABLE 3 : COMPONENTS OF GROSS DOMESTIC PRODUCT (At Factor Cost)

Year	Agriculture & A	Ilied Activities	Agric	ulture	Indus	stry	Mining & C	uarrying	
	At Constant Prices	At Current Prices							
1	2	3	4	5	6	7	8	9	
-			New series	(Base : 1999-	2000)				
1950-51	123884	5080	108374	4801	23865	1153	3178	75	
1951-52	125732	5245	110151	4967	24968	1283	3570	84	
1952-53	129697	5110	114733	4884	25803	1218	3652	86	
1953-54	139685	5630	125051	5416	27574	1361	3707	87	
1954-55	143791	4789	128548	4543	29419	1415	3866	91	
1955-56	142549	4644	126646	4391	31512	1458	3927	93	
1956-57	150298	5900	134226	5618	33800	1737	4126	113	
1957-58	143547	5778	127405	5487	35343	1869	4394	131	
1958-59	158010	6703	141733	6403	37116	2001	4532	140	
1959-60	156420	6734	139666	6404	39688	2238	4765	149	
1960-61	166954	7090	149838	6717	43297	2608	5478	177	
1961-62 1962-63	167095 163771	7343 7497	149355 146149	6919 7063	46949 50739	2870 3209	5794 6481	187 224	
1962-63	167602	8823	148887	8349	55326	3652	6673	243	
1964-65	183062	10781	164271	10268	58850	4018	6769	256	
1965-66	162848	10751	142144	10173	60423	4317	7565	296	
1966-67	160532	12506	138892	11849	61287	4751	7743	321	
1967-68	184404	15650	162603	14924	62124	5128	7978	374	
1968-69	184112	16132	162042	15263	65650	5574	8204	399	
1969-70	195946	17644	173788	16747	72138	6417	8609	444	
1970-71	209843	18192	186668	17221	73235	7000	8019	465	
1971-72	205903	18584	181696	17512	75839	7730	8231	487	
1972-73	195570	20440	171471	19218	79016	8558	8717	525	
1973-74	209655	26936	185920	25426	82119	10251	8827	600	
1974-75	206461	29509	180797	27700	84793	13260	9265	856	
1975-76	233074	29249 29882	206462	27284	88311 95715	14125	10388	1088	
1976-77 1977-78	219606 241646	29882 35380	193905 218172	27749 33004	101219	15867 17782	10757 11094	1245 1376	
1977-76	247210	36361	222520	33595	112569	20447	11395	1496	
1979-80	215630	37616	192788	34384	109864	23584	11517	1867	
1980-81	243421	47312	220624	43475	112002	26657	12921	2327	
1981-82	254622	53327	231320	48809	121997	32733	14687	4150	
1982-83	253907	57496	230997	52321	127645	36557	16433	5121	
1983-84	279605	68613	255837	62947	139098	42995	16909	5737	
1984-85	284037	73989	259633	67679	145294	48610	17107	6454	
1985-86	284930	79294	260139	72445	150992	54063	18040	6902	
1986-87	283763	85108	259122	77409	161250	60348	20249	8047	
1987-88	279257	94677	254647	86060	170277	67753	21013	8428	
1988-89	322932	116925	297543	107149	186578	80841	24411	11020	
1989-90 1990-91	326773 339893	129222 150800	298720 311500	117796 137925	202947 214552	96292 110760	26266 29014	12161 13775	
1990-91	333256	176166	304301	162403	213925	121918	29988	15096	
1992-93	355421	197569	325777	181799	220880	142566	30264	17409	
1993-94	367231	229172	336136	210518	237376	165663	30685	20249	
1994-95	384549	263895	352069	241990	262164	202888	33535	22839	
1995-96	381875	286946	348626	263446	296664	248450	35502	25467	
1996-97	419759	345020	384886	318410	320266	280247	35699	27918	
1997-98	409039	366125	373446	334713	326720	300389	39201	33677	
1998-99	434892	420486	400030	386922	338369	332464	40309	35955	
1999-00	446515	446515	409660	409660	350233	350233	41594	41594	
2000-01	445403	449565	407176	408932	372599	392138	42589	45706	
2001-02	473249	486617	433475	442464	381366	410667	43335	47871	
2002-03	438966	472060	398206	425521	407276	463302	47168	62742	
2003-04	482676	532342	441360	483030	431724	509106	48626	63882	
2004-05 2005-06	482910 511114	552422 625635	441647 467984	501415 567897	468451 506519	598271 679781	52591 55164	84776 94533	
2005-06 2006-07	531315	686044	487010	625161	560775	794127	60038	106024	
2000-07	557122	782597	511274	718278	602032	898627	61999	117431	
2008-09	566045	861753	3		617882	985297	64244	125414	

(Continued)

TABLE 3 : COMPONENTS OF GROSS DOMESTIC PRODUCT (At Factor Cost) (Contd.)

Year	Manufac	turing	Electricity, Gas &	Water Supply	Servi	ces	Constru	iction
	At Constant Prices	At Current Prices						
1	10	11	12	13	14	15	16	17
			New series	(Base : 1999-2	2000)			
1950-51	19996	1056	691	23	76349	3431	9931	249
1951-52	20627	1171	771	28	78827	3679	10610	285
1952-53	21345	1103	807	29	80144	3772	9841	265
1953-54	22997	1243	870	31	82487	3989	10144	266
1954-55	24608	1289	945	35	87143	4181	11399	295
1955-56	26535	1325	1050	40	93071	4482	13558	368
1956-57	28528	1578	1146	47	98369	4915	15117	416
1957-58	29627	1680	1322	58	99712	5221	13268	382
1958-59	31094	1794	1490	67	104911	5647	14827	441
1959-60	33206	2009	1717	80	110424	6134	15844	491
1960-61	35961	2339	1857	91	118316	6849	18324	635
1961-62	39032	2580	2124	103	124354	7246	18968	666
1962-63	41873	2865	2385	121	131135	8020	19674	702
1963-64	45834	3267	2819	143	140222	8866	22076	803
1964-65	49003	3593	3077	170	148833	10052	23850	953
1965-66	49458	3829	3400	192	154037	11031	25442	1095
1966-67	49848	4188	3696	241	160177	12379	27533	1291
1967-68	50041	4475	4105	279	167308	13930	29513	1510
1968-69	52812	4843	4634	332	174669	14935	30546	1638
1969-70	58478	5578	5050	395	183108	16198	31495	1828
1970-71	59852	6088	5364	448	190513	17711	31426	1934
1971-72	61808	6754	5800	489	196487	19433	31563	2128
1972-73	64231	7505	6068	529	202269	21307	32304	2319
1973-74	67088	9081	6204	570	205731	24158	30206	2391
1974-75	69044	11670	6485	734	212398	29569	29244	2618
1975-76	70500	12139	7423	898	228688	33755	33413	3271
1976-77	76682	13432	8275	1190	241005	37305	36681	3871
1977-78	81455	15046	8670	1360	254546	41361	40394	4496
1978-79	91516	17326	9659	1624	267828	44893	39493	4614
1979-80	88568	19840	9778	1877	271303	49957	37408	4656
1980-81 1981-82	88740 95990	22159 26062	10340	2171 2521	286499 301413	58550	42339 44658	6059 6922
1981-82			11320	2981	316309	69098 79285	44658	7848
1982-83	99147 109291	28455 33736	12065 12899	3521	333966	91142	43764	9023
1983-84	113890	37899	14297	4258	353153	105095	45279	10586
1985-86	117520	42018	15431	5143	379128	121070	47843	12355
1986-87	123977	46451	17023	5850	405204	138226	48986	14216
1987-88	130920	52759	18344	6566	430732	159160	51795	16854
1988-89	142043	62183	20123	7637	460192	186024	55436	19651
1989-90	154599	74995	22082	9136	499459	216621	59336	22805
1990-91	161979	86006	23559	10979	529127	253472	66330	27699
1991-92	158094	93379	25843	13442	551890	296084	67696	31133
1992-93	162979	108182	27636	16976	581723	341382	70053	35521
1993-94	176982	125402	29710	20011	619209	397316	70452	39240
1994-95	196133	154943	32495	25107	655363	458456	74243	45093
1995-96	226458	193731	34704	29252	718434	547893	78683	53042
1996-97	247975	220759	36593	31570	768353	635444	80158	60382
1997-98	248101	229595	39417	37117	837504	735419	88553	74999
1998-99	255872	250581	42189	45928	905148	863133	94109	88784
1999-00	264114	264113	44526	44526	989778	989778	102007	102007
2000-01	284571	300392	45439	46040	1046299	1083314	108362	111999
2001-02	291803	315314	46228	47482	1117991	1200442	112692	120865
2002-03	311685	346029	48423	54531	1202044	1326053	121650	135172
2003-04	332363	388549	50735	56675	1308358	1496722	136224	156806
2004-05	361115	453603	54745	59892	1437407	1727008	158212	212807
2005-06	393842	519743	57513	65505	1598468	1976969	183868	264173
2006-07	440193	617648	60544	70455	1779029	2299212	205543	319180
2007-08	476303	705130	63730	76066	1970563	2639668	226325	376266
2008-09	487739	780405	65899	79478	2155448	3086132	242577	437017

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TABLE 3 : COMPONENTS OF GROSS DOMESTIC PRODUCT (At Factor Cost) (Concld.)

Note : Data for 2006-07 are Provisional Estimates, 2007-08 are Quick Estimates and 2008-09 are Revised Estimates.

Source : Central Statistical Organisation.

2. A copy of the original <u>GDP</u> data for the base year 2004-05, as sample raw data (this data was used to obtain Figure 1 and Figure 2)

TABLE 2 : MACRO-ECONOMIC AGGREGATES (At Constant Prices)

						(₹ Billion)
Year	GDP at Factor	Consumption of	NDP at Factor	Indirect Taxes	GDP at Market	NDP at Market
	Cost	Fixed Capital	Cost	less Subsidies	Prices	Prices
1	2	3	4	5	6	7
			Base Year : 2004-05			
1952-53	2942.67	222.49	2720.18	162.77	3105.44	2882.95
1953-54	3121.77	218.52	2903.25	174.66	3296.43	3077.91
1954-55 1955-56	3254.31 3337.66	188.45 193.05	3065.85 3144.62	200.72 229.18	3455.03 3566.84	3266.57 3373.80
1956-57	3527.66	202.26	3325.40	238.16	3765.82	3563.56
1957-58	3485.00	209.77	3275.23	265.33	3750.33	3540.56
1958-59	3749.48	221.64	3527.84	278.01	4027.49	3805.85
1959-60	3831.53	229.51	3602.02	301.67	4133.20	3903.69
1960-61	4102.79	229.78	3873.01	257.58	4360.37	4130.59
1961-62	4230.11	241.09	3989.02	292.59	4522.70	4281.61
1962-63	4319.60	254.75	4064.85	335.67	4655.27	4400.52
1963-64	4538.29	269.19	4269.10	396.03	4934.32	4665.13
1964-65 1965-66	4882.47 4704.02	288.67 305.05	4593.81 4398.97	419.60 458.30	5302.07 5162.32	5013.41 4857.27
1965-66	4704.02 4751.89	326.79	4425.11	456.30 407.57	5152.32	4832.68
1967-68	5138.60	349.13	4789.47	424.64	5563.24	5214.11
1968-69	5272.70	367.83	4904.88	479.02	5751.72	5383.90
1969-70	5616.30	392.18	5224.11	511.57	6127.87	5735.68
1970-71	5897.86	438.05	5459.81	546.03	6443.89	6005.84
1971-72	5957.41	457.27	5500.15	592.35	6549.76	6092.50
1972-73	5938.43	474.52	5463.91	575.09	6513.52	6039.00
1973-74	6208.72	495.60	5713.11	519.46	6728.18	6232.57
1974-75	6280.79	526.96	5753.83	527.14	6807.93	6280.97
1975-76	6846.34	555.76	6290.58	584.51	7430.85	6875.09
1976-77	6931.91	591.99	6339.92	622.52	7554.43	6962.44
1977-78 1978-79	7449.72 7859.64	617.80 643.02	6831.91 7216.63	652.77 705.70	8102.49 8565.34	7484.68 7922.33
1979-80	7450.83	674.32	6776.51	665.85	8116.68	7442.36
1980-81	7985.06	711.44	7273.62	678.34	8663.40	7951.96
1981-82	8434.26	748.43	7685.83	749.48	9183.74	8435.31
1982-83	8680.91	791.54	7889.37	822.03	9502.94	8711.40
1983-84	9362.69	831.01	8531.68	832.91	10195.60	9364.59
1984-85	9733.57	888.77	8844.80	851.58	10585.15	9696.38
1985-86	10138.66	948.55	9190.10	1002.67	11141.33	10192.77
1986-87	10576.12	1006.13	9569.99	1097.38	11673.50	10667.37
1987-88	10949.92	1077.45	9872.47	1186.47	12136.39	11058.94
1988-89 1989-90	12062.43 12802.28	1135.60 1203.21	10926.83	1242.43 1293.87	13304.86 14096.15	12169.26 12892.94
1990-91	13478.89	1287.35	11599.07 12191.54	1397.26	14876.15	13588.80
1991-92	13671.71	1376.63	12295.07	1361.66	15033.37	13656.73
1992-93	14405.03	1458.47	12946.56	1452.52	15857.55	14399.08
1993-94	15223.43	1520.23	13703.20	1387.48	16610.91	15090.68
1994-95	16196.94	1622.92	14574.02	1520.08	17717.02	16094.10
1995-96	17377.40	1725.89	15651.52	1681.59	19058.99	17333.11
1996-97	18763.19	1836.11	16927.08	1734.67	20497.86	18661.75
1997-98	19570.31	1980.48	17589.84	1757.67	21327.98	19347.51
1998-99	20878.27	2118.88	18759.39	1768.72	22646.99	20528.11
1999-00	22549.42	2286.51	20262.91	2100.87	24650.29	22363.78
2000-01 2001-02	23484.81 24749.62	2441.16 2599.44	21043.65 22150.18	2112.30 2082.28	25597.11 26831.90	23155.95 24232.46
2002-03	25709.35	2733.67	22975.68	2143.23	27852.58	25118.91
2003-04	27757.49	2910.27	24847.22	2284.41	30041.90	27131.63
2004-05	29714.64	3198.91	26515.73	2707.45	32422.09	29223.18
2005-06	32530.73	3508.93	29021.80	2901.71	35432.44	31923.51
2006-07	35643.64	3857.00	31786.64	3071.25	38714.89	34857.89
2007-08	38966.36	4276.29	34690.08	3543.11	42509.47	38233.19
2008-09	41586.76	4689.04	36897.72	2576.74	44163.50	39474.46
2009-10	45160.71	5219.06	39941.65	2747.76	47908.47	42689.41
2010-11	49185.33	5703.01	43482.32	3638.53	52823.86	47120.85
2011-12	52475.30	6278.34	46196.96	3855.20	56330.50	50052.16
2012-13	54821.11 57417.01	6878.84 7536.74	47942.27	4177.36	58998.47	52119.63
2013-14	57417.91	7536.74	49881.16	4540.51	61958.42	54421.67

(Continued)

3. A copy of the **Components of SGDP** for the base year 1993-94, as sample raw data. (This data was used in the generation of figures 7 through 10.3)

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TABLE 7 : COMPONENTS OF NET STATE DOMESTIC PRODUCT AT FACTOR COST BY INDUSTRY OF ORIGIN (At Constant Prices)
(Base : 1993-94) (Contd.)

State/	Agriculture and allied acitivities						Indus	try			Services							
Union	Agriculture	Fore-	Fishing	Total	Mining		1anufactu		Electri	Total	Const-	Transport,	Trade,	Banking	Real	Public	Other	Total
Territory/ Year	•	stry & logging	risting	(2+3+4)	& qua- rrying	Regi- stered	Unregi- stered	Sub Total (7+8)		(6+9+10)	ruction		hotels and restau- rants	& insu- rance	estate, owner- ship of dwelling and business services	admini- stration	services	(12 to 18
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Chhattisgarh																		
1993-94	3718.2	396.8	54.4	4169.4	948.7	1590.3	709.3	2299.6	405.6	3653.9	616.9	563.3	1211.7	212.4	706.0	355.9	673.6	4375.5
1994-95	3853.0	418.3	84.8	4356.0	827.1	1583.3	568.8	2152.2	398.3	3377.6	611.9	596.6	1211.2	236.8	727.7	364.1	699.3	4317.2
1995-96	3651.8	400.8	84.8	4137.4	896.7	1413.5	707.7	2121.2	475.3	3493.2	723.3		1312.0	268.4	749.9	392.8	757.1	4815.6
1996-97	3726.6	413.2	109.3	4249.1	919.8	1566.2	732.9	2299.1	460.6	3679.5	725.5	733.8	1277.0	350.0	774.5	418.1	834.0	5011.8
1997-98	2816.8	438.7	105.1	3360.6	933.4	2656.9	769.6	3426.5	435.5	4795.3	730.3	798.8	1247.4	546.5	799.2	417.5	855.6	5309.2
1998-99	3146.9	431.1	116.9	3694.9	1132.3	2539.1	813.8	3352.9	211.5	4696.7	730.0		1240.0	409.7	765.1	558.8	991.9	5312.8
1999-00	2866.7	466.0	139.8	3472.4	1512.7	1578.5	730.0	2308.5	226.3	4047.4	980.3		1562.0	461.2	777.8	531.5	1002.2	5927.5
2000-01 2001-02	2236.7 3407.9	482.2 534.9	169.8 172.3	2888.8 4115.1	1727.0 1854.5	1591.3 1571.1	602.6 778.7	2193.9 2349.8	259.2 189.3	4180.1 4393.5	591.8 755.0		1580.2 1689.9	494.0 527.8	853.6 861.0	528.1 937.6	1128.2 993.4	7282.0 8432.7
		517.5	172.3	3889.7	2105.5	2058.9	713.5	2772.4	212.2	5090.0	755.U 898.1	1407.3		621.0	870.2	937.6		7139.3
2002-03 2003-04	3193.3 3509.7	564.8	199.4	4273.8	2326.0	2233.2	990.4	3223.7	212.2	5769.4	1070.7	1634.2	1717.7 1887.3	667.3	884.5	611.3	983.3 1266.7	7745.9
2003-04	2798.2	540.6	219.2	3558.0	2554.0	2425.6	1066.2	3491.8	243.3	6289.1	1075.5	1820.2	2032.7	736.2	893.9	650.6	1376.1	8275.2
Goa	2700.2	540.0	210.2	0000.0	2004.0	2420.0	1000.2	0401.0	240.0	0203.1	1070.0	1020.2	2002.7	700.2	000.0	030.0	1070.1	0270.2
1993-94	225.6	10.3	82.0	317.9	111.7	454.5	61.6	516.1	20.7	648.6	100.8	207.9	215.0	131.2	136.5	91.2	152.8	944.1
1994-95	222.6	11.1	68.5	302.1	122.1	332.1	104.7	436.8	22.6	581.5	121.1	194.0	340.5	154.6	142.4	89.5	154.0	1146.8
1995-96	222.1	11.7	63.1	296.9	111.8	372.4	103.4	475.7	22.7	610.2	108.2	173.4	347.5	302.9	146.9	90.0	149.0	1272.3
1996-97	239.4	10.2	60.8	310.4	99.3	488.9	102.0	590.8	23.8	714.0	140.7	175.2	413.1	448.1	152.9	101.5	146.5	1533.4
1997-98	225.1	10.6	85.3	321.0	152.5	452.8	99.5	552.4	24.4	729.3	146.8	150.6	412.1	434.7	164.7	115.5	153.2	1523.9
1998-99	265.3	7.4	54.4	327.0	148.6	694.1	152.4	846.4	37.3	1032.4	190.1	217.9	633.6	385.1	177.0	148.7	172.9	1904.7
1999-00	299.0	8.7	47.8	355.5	111.1	796.2	163.3	959.4	38.2	1108.7	192.0	198.6	512.8	435.8	191.0	149.8	189.6	1843.2
2000-01	260.9	9.7	44.2	314.8	107.5	827.8	174.1	1001.9	39.6	1149.0	255.6	209.2	617.0	301.3	213.5	154.5	217.4	1925.2
2001-02	288.1	11.2	45.1	344.5	110.9	948.2	179.6	1127.8	55.8	1294.5	306.1	266.5	428.2	456.6	243.6	159.2	243.8	2039.8
2002-03	300.2	11.9	36.6	348.8	131.5	1003.0	291.6	1294.7	70.6	1496.8	324.9	360.8	816.0	359.8	281.3	176.9	255.3	2611.2
2003-04	333.5	10.5	57.0	401.0	137.2	519.9	185.6	705.4	30.5	873.1	334.5	349.9	465.9	350.2	294.7	192.7	122.7	2173.4
2004-05	359.7	11.6	53.8	425.1	156.2	627.3	206.9	834.1	44.5	1034.9	350.0	348.9	466.8	351.0	364.8	193.2	123.0	2281.5
Gujarat																		
1993-94	9230.9	393.2	697.8		1117.8	7324.5	3780.1	11104.6	927.7	13150.1	2136.4		5012.3	3227.0	2578.3	1371.8	2500.9	20367.7
1994-95	13569.3	404.2	744.8		1192.2	9639.0	4065.9	13704.9	910.7	15807.9	2089.1	2481.3	5845.0	3369.5	2645.3	1409.9	2737.4	21906.1
1995-96 1996-97	11732.3 16237.2	408.1 406.9	655.6 719.2	12796.0 17363.4	1232.5 1248.2	10359.3 12092.7	4508.2 4924.5	14867.5 17017.1	1115.8 1144.4	17215.8 19409.7	2280.9 2287.7	2877.1 3072.5	6508.9 7566.8	3850.2 3488.8	2713.9 2775.8	1522.8 1533.6	2863.9 3154.4	24261.9 25649.6
		406.9		15813.7	1248.2	10323.9	4924.5	15091.3	1244.2	17562.1	2828.8	3887.9	8352.5	3926.6	3057.7	1741.9		
1997-98	14627.2 15698.6	429.6	634.3		1220.0	10739.0	5472.4	16211.4	1355.2	18796.2	3085.4	4097.5	8640.8	4226.4	3237.7	2280.6	3475.9 3801.8	28562.7 31040.4
1999-00	10628.0	413.0	702.0	11743.0	1167.0	11184.0	6345.0	17529.0	1436.0	20132.0	4128.0	4923.0	8340.0	5188.0	3480.0	2656.0	4572.0	35060.0
2000-01	9219.0	426.0	646.0		1146.0	8226.0	8021.0	16247.0	1448.0	18841.0	3417.0		8824.0	4500.0	3804.0	2528.0	4965.0	36499.0
2001-02	12672.0	436.0	608.0	13716.0	1201.0	8311.0	8180.0	16491.0	1457.0	19149.0	3114.0	6175.0	9729.0	4740.0	4019.0	2391.0	5260.0	38348.0
2002-03	10599.0	447.0	638.0	11684.0	1268.0	11181.0	8548.0	19729.0	1988.0	22985.0	4055.0	6843.0	10604.0	5293.0	4256.0	2358.0	5580.0	41957.0
2003-04	17593.0	467.0	618.0	18678.0	1388.0	12939.0	9102.0	22041.0	1905.0	25334.0	4386.0	7370.0	11760.0	5688.0	4532.0	2415.0	5975.0	45253.0
2004-05	15704.0	461.0	614.0	16779.0	1438.0	14592.0	9610.0	24202.0	2072.0	27712.0	5186.0		12946.0	6152.0	4844.0	2386.0	6367.0	49535.0
Haryana																		
1993-94	8201.5	48.0	26.8	8276.3	39.5	2338.4	1250.4	3588.8	-136.7	3491.5	1479.3	1193.4	2463.6	521.9	562.6	457.8	975.2	7928.9
1994-95	8821.0	51.2	27.8	8900.0	39.9	2645.2	1311.8	3956.9	-137.4	3859.4	1580.5	1233.1	2625.5	575.1	587.3	480.3	994.1	8393.5
1995-96	8377.7	51.9	31.1	8460.8	31.8	2907.5	1378.6	4286.0	-142.8	4175.1	1643.0	1336.3	2865.0	624.9	610.3	495.4	1043.2	8953.4
1996-97	9328.8	54.2	33.0	9416.1	75.4	3078.4	1484.2	4562.6	-139.8	4498.2	1618.2	1543.6	3496.9	881.5	634.9	543.4	1126.0	10202.6
1997-98	8472.2	53.0	35.1	8560.3	55.5	3307.7	1541.6	4849.3	-140.3	4764.5	1701.2		3749.1	1079.3	657.6	575.1	1198.6	10983.5
1998-99	8754.4	50.3	35.0	8839.7	74.5	3444.4	1649.6	5093.9	-130.9	5037.5	1843.1	1954.1	3676.4	1057.3	676.0	821.6	1337.5	11678.2
1999-00	9161.3	49.0	34.1	9244.3	82.2	3476.9	1750.7	5227.7	-149.9	5160.0	1934.2	2229.3	4271.9	1359.8	691.0	808.2	1364.9	13045.1
2000-01	9366.1	48.5	39.0	9453.6	92.0	3578.2	1845.7	5423.9	-129.7	5386.1	2034.7	2489.5	5267.1	1355.5	715.6	781.1	1401.9	14489.2
2001-02	9344.2	47.0	40.7	9431.9	115.5	3745.6	1933.0	5678.5	-137.6	5656.4	2199.3		5936.6	1398.7	735.0	787.9	1452.6	15836.4
2002-03	9265.3	48.3	39.5	9353.1	69.1	4035.4	2043.8	6079.1	-138.0	6010.2	2102.1	3375.7	6452.6	1643.4	756.6	793.9	1502.5	17168.1
2003-04	10103.9	49.0	45.6	10198.5	82.1	4455.7	2207.3	6663.0	-140.6	6604.5	2192.0	3958.0	6985.5	1765.8	778.8	843.8	1540.8	18731.2
2004-05	10469.6	49.7	49.1	10568.3	87.7	4966.7	2393.3	7360.0	-148.8	7298.9	2278.7	4615.8	7979.1	1931.8	801.7	924.2	1584.6	20924.6

4. A copy of the Net SDP at factor cost for the base years 1980-81, 1993-94, 1999-2000 and 2004-05. (This data was used in the generation of figures 5 and 6)

TABLE 6 : NET STATE DOMESTIC PRODUCT AT FACTOR COST - STATE-WISE (At Constant Prices)

(₹ Billion) Year Andhra Bihar Jhar-Karnataka Arunachal Assam Goa Gujarat Haryana Himachal Jammu & Pradesh Pradesh Pradesh Kashmir Khand 1 2 3 4 5 6 8 9 10 11 12 (Base Year : 1980-81) 1984-85 87.49 1.37 28.07 84.46 35.45 7.33 12.02 70.23 1985-86 12.30 93.03 1.54 29.92 82.93 3.38 82.14 41.81 8.31 67.33 1986-87 90.50 1.65 29.07 3.54 41.84 8.92 89.50 87.20 12.46 73.65 1987-88 30.37 41.10 11.10 102.74 1.75 84.55 3.93 77.49 8.94 78.83 1988-89 120.29 1.90 30.60 95.23 4.77 108.73 51.11 10.05 12.57 85.63 1989-90 129.86 1.95 32.86 93.65 4.98 106.81 51.78 11.23 12.85 90.46 1990-91 135.80 2.31 34.26 5.68 108.39 57.19 13.60 91.12 102.53 11.51 102.70 1991-92 2.64 35.77 96.73 5.66 99.44 58.37 11.57 13.90 143.42 1992-93 139.55 2.71 36.13 131.44 58.35 12.10 14.52 105.08 1993-94 37 54 12 57 15 22 112.91 155 43 3.10 93 20 6.76 127 41 60.98 (Base Year: 1993-94) 1993-94 8.12 369.82 516.55 134.77 207.80 20.02 425.60 194.22 42.50 55.00 134.03 1994-95 545.64 7.96 137.96 231.63 20.80 511.04 208.35 46.64 57.45 139.64 389.17 22.25 526.29 212.54 60.31 143.09 409.74 1995-96 579.51 9.15 141.25 195.82 49.21 1996-97 619.55 8.60 144.67 245.69 26.02 606.53 237.59 51.99 63.21 447.37 134.60 8.84 26.28 239.65 66.52 475.17 1997-98 603.21 147.04 234.04 606.47 55.71 176.16 1998-99 680.36 9.10 145.74 248.79 32.85 649.21 252.43 59.66 70.05 191.67 539.61 651.63 1999-00 709.04 9.48 150.78 261.37 33.34 270.64 72.70 182.28 565.43 66.22 (Base Year: 1999-2000) 1999-00 1163.60 14.97 320.11 460.71 55.70 925.41 473.29 124.67 135.33 302.29 905.32 2000-01 1260.35 16.07 328.21 536.56 52.87 864.31 510.90 132.62 139.17 266.63 911.36 2001-02 336.68 54.92 934.55 550.36 141.85 285.00 927.88 1317.50 18.64 505.79 139.38 2002-03 1347.49 17.75 357.08 569.75 58.26 1016.03 584.10 146.17 149.07 292.98 977.65 2003-04 1479.50 19.68 379.05 533.01 62.25 1185.25 641.56 155.96 156.73 315.15 996.69 2004-05 1587.14 22.22 392.07 600.45 68.91 1255.99 170.76 165.19 368.86 1097.75 696.88 (Base Year : 2004-05) 2004-05 1213.88 31.88 471.81 701.67 1722.65 862.22 211.89 232.92 530.56 1487.29 109.99 2005-06 1972.70 940.11 243.71 1640.31 1281.50 32.81 486.02 684.19 230.09 506.78 2006-07 1416 10 34 58 507 97 802.60 130.85 2139 54 1047 00 248 19 257 94 515 27 1810.86 2007-08 1592.70 38.73 529.68 844.15 136.55 2392.53 1128.96 263.62 273.87 630.05 2038.10 2008-09 1633.41 41.91 561.23 972.84 147.28 2494 80 1215.88 276.49 291.02 604.72 2183.09 2009-10 1744.01 45.39 612.94 1019.38 161.19 2847.32 1367.80 291.49 305.12 664.65 2183.63 2010-11 1860.41 47.35 643.10 1175.03 192.93 3158.92 1460.53 315.90 322.56 761.34 2408.17 2011-12 669.42 232.79 3368.86 339.90 801.57 1915.54 49.83 1295.21 1585.23 339.55 2480.40 2012-13 1986.88 48.53 694.17 1432.50 244.21 3564.77 1671.69 360.63 358.98 868.61 2612.50 2013-14 52.92 1566.71 260.92 3854.72 1783.07 383.74 380.39 941.21 2805.61 2131.29 737.79 2014-15 2284.50 56.66 773.94 1718.02

(Continued)