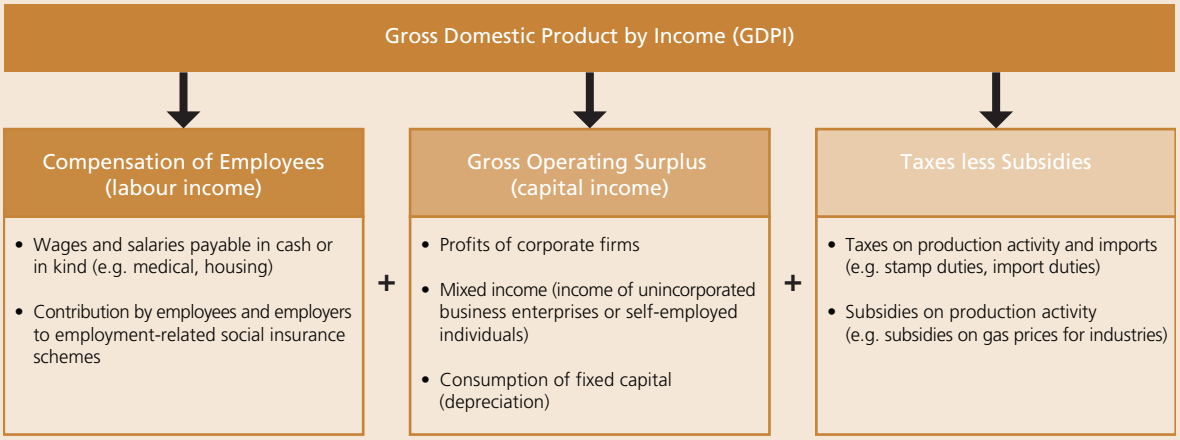
Trends in Malaysia's Gross Domestic Product by Income

Introduction

In July 2014, the Department of Statistics, Malaysia (DOSM) published the nominal Gross Domestic Product by Income (GDPI) for Malaysia, covering annual data from 2005 to 2013. This income-based approach complements the existing computations of Gross Domestic Product (GDP) using the production and expenditure approaches, thus providing more comprehensive information on Malaysia's economy. GDPI measures the total income that the production activity generates for the owners of capital, for labour and for the government (United Nations, 2004). The three components of GDPI are: (i) Compensation of Employees (CoE, henceforth referred to as labour income); (ii) Gross Operating Surplus (GOS, henceforth referred to as capital income); and (iii) Taxes less Subsidies on Production and Imports (Diagram 1).

Diagram 1

GDPI Consists of Three Components



Source: Department of Statistics, Malaysia

Drawing on the release of the GDPI data, this article provides a preliminary analysis on the trends in labour and capital income, with a special focus on the share of labour income in Malaysia.

Growth trends of labour and capital income

The trends in the growth rates of the GDPI components relative to overall GDP are shown in Chart 1, whereby the growth rate of labour income is slightly more stable throughout the period relative to capital income. This reflects the fact that wages generally tend to be more sticky, and changes to overall income are more likely to be reflected in the returns to capital. This was observed during the height of the 2009 financial crisis in the advanced economies, when the contraction in nominal GDP was reflected in both capital income and labour income, but more so in the former rather than the latter.

Chart 2 shows the performance of labour and capital income by economic sectors in recent years. Between 2005 and 2013, labour income grew at a compounded annual growth rate of 9.5%, outpacing capital income growth of 7.4%. This trend partly reflected the strong performance of labour income growth in the services, construction and mining sectors. In the services sector, labour income recorded double-digit growth of 10.7% per annum, while capital income grew by 8.1%. Almost all services sub-sectors experienced higher growth in labour income compared with capital income, except for the transportation, storage and communication sub-sector. Similarly, labour income expanded at double-digit growth rates of 13.1% and 10.2% in the construction and mining sectors, respectively, outpacing the average growth of capital income.

Chart 1

Growth Rates of Labour and Capital Income Co-move with Nominal GDP

Source: Department of Statistics, Malaysia

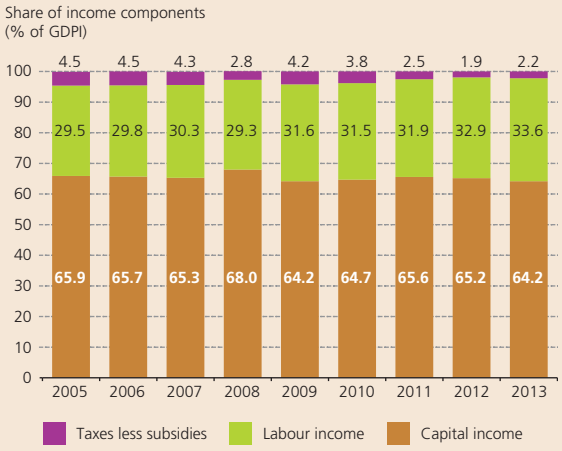
Chart 2

Average Growth in Labour Income Outpace Capital Income Growth, Driven by Key Sectors

Source: Department of Statistics, Malaysia

Chart 3

The Largest Component of GDPI is Capital Income



Source: Department of Statistics, Malaysia

Chart 4

Labour Income Share Has Been Increasing Since 2005

Source: Department of Statistics, Malaysia and Bank Negara Malaysia estimates

Trends in share of labour income

In terms of share, capital income forms the largest component of GDPI (Chart 3). However, with the growth of labour income outpacing the growth of capital income, the share of labour income to GDP has risen steadily from 29.5% in 2005 to 33.6% in 2013. By definition, however, the labour income component in GDPI excludes income earned by self-employed individuals[1]. Therefore, to be more representative of the actual overall labour income, Gollin (2002) suggested to include the estimated income earned by the self-employed workers, especially for countries with large numbers of self-employed individuals (see Explanation Box). With such adjustments, the share of labour income for Malaysia is higher, on average, by 8.0 ppt. throughout the period (Chart 4).

[1] A sub-component of capital income is mixed income (Diagram 1), which is income accrued to self-employed individuals or unincorporated businesses. The breakdown for mixed income in GDPI, however, is not available.

Explanation Box: Adjusting labour income to include both employed and self-employed workers

In Malaysia, self-employed individuals account for 21% of total employment (DOSM Labour Force Survey, 2013). As a result, the labour income component of GDPI, by definition, is likely to understate the total income accrued to workers. Following Gollin (2002), the labour income is augmented by estimating the earnings of the self-employed. These estimates of self-employment earnings are removed from capital income and added to labour income, resulting in the adjusted labour income.

Both the adjusted and non-adjusted measures display a similar trend of the rising share of labour income between 2005 and 2013. By 2013, the adjusted labour income that included both employed and self-employed workers amounted to 42.1% of total GDP. Accordingly, the adjusted capital income is lower from 58.1% of total GDP in 2005 to 55.7% in 2013.

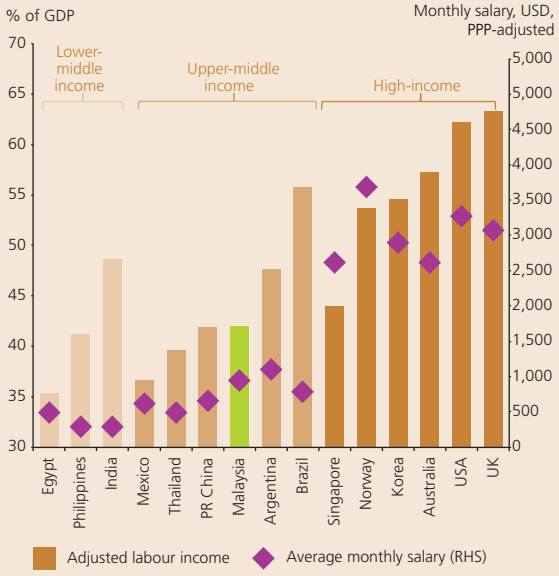
Cross-country comparison of labour income shares

Despite the rising trend, the labour income share in Malaysia, even after accounting for the income of the self-employed, remains relatively low compared with other upper-middle income economies (Chart 5). Within the region, Malaysia's adjusted labour income share (42.1%) is lower than Korea (54%) and Singapore (44%).

While this may be a cause for concern, it is important to note that a higher share of labour income does not necessarily correspond with higher average wages. As noted in both Chart 5 and 6, Brazil and India, for instance, have higher labour income shares than Malaysia, but lower average monthly wages. On the other hand, Singapore has a relatively low labour income share, but a high average wage level. Of significance, most advanced economies tend to have both high average salaries as well as higher labour income shares.

Chart 5

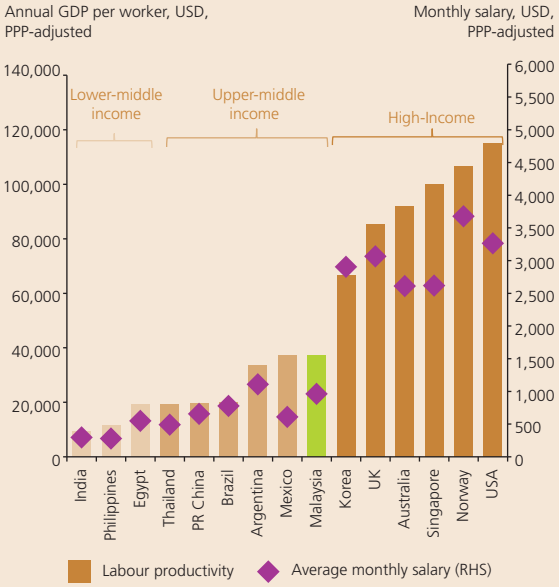
High Labour Income Shares Do Not Correspond with High Average Salaries



Source: Penn World Table; Statista; Department of Statistics, Malaysia; and Bank Negara Malaysia estimates

Chart 6

Average Salaries Generally Coincide with Labour Productivity



Source: The Conference Board; Statista; Department of Statistics, Malaysia; and Bank Negara Malaysia estimates

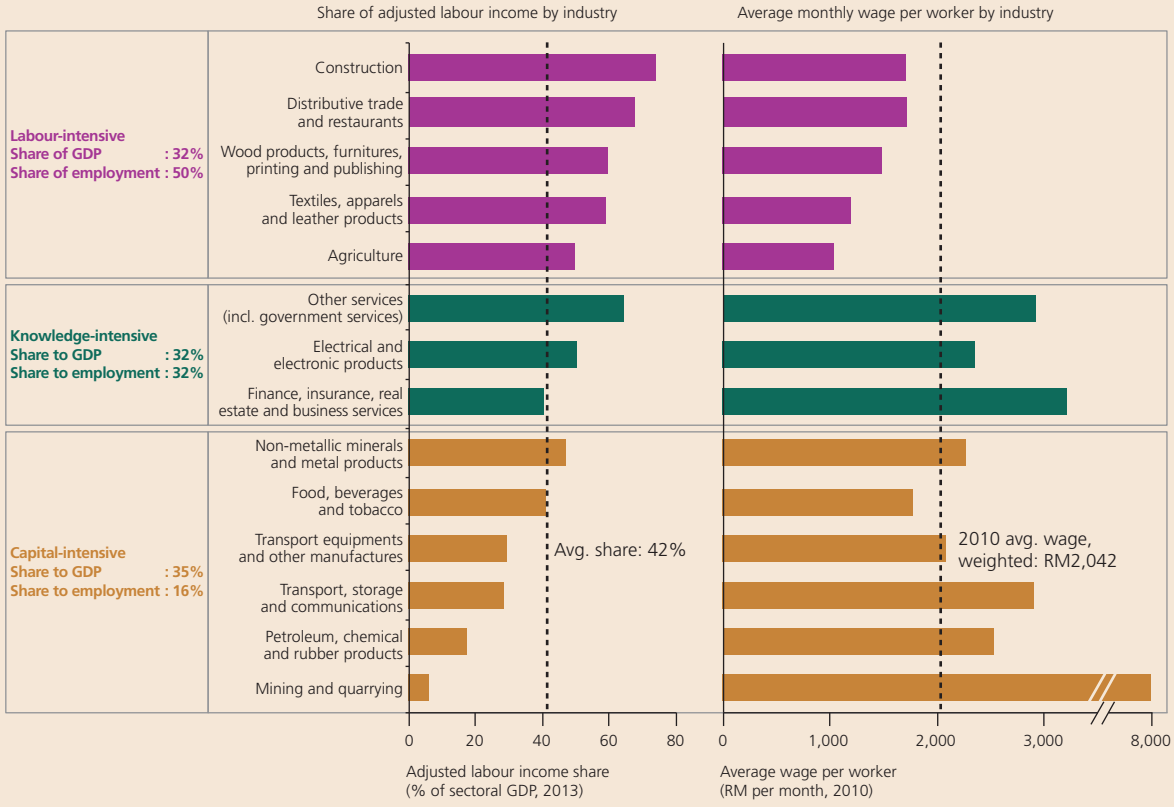
The cross-country variations are the outcome of differences in economic structures. Economies that are more involved in low-productivity, labour-intensive industries tend to have lower average wages but will have a high share of labour income in GDPI due to the large pool of low-skilled workers. On the other hand, economies with higher productivity levels like Korea and Australia are characterised by high value-added activities with a preponderance of high-skilled jobs. These economies tend to enjoy high average wages which, in turn, correspond with high labour income shares as well. This is supported by Chart 6, which shows that average wages tend to correspond with productivity levels of the economies. This simply re-emphasises the point that high value-added economic activity and higher productivity levels are necessary to raise average wages and consequently, labour income shares in an economy.

Sectoral analysis of labour income shares and average wages in Malaysia

Turning specifically to Malaysia, a sectoral analysis is undertaken by classifying the industries into three broad categories[2], based on the intensity and quality of labour used as a factor of production, relative to capital. The first category is the labour-intensive industries, which has a large proportion of labour relative to capital. This includes the plantation, hotels and restaurant services, construction and manufacturing of furniture and garments industries. The capital-intensive industries, such as the oil and gas, and steel fabrication manufacturing industries, on the other hand, have a larger capital-to-labour ratio[3].

Chart 7

High Labour Income Shares Do Not Necessarily Coincide with High Average Wages



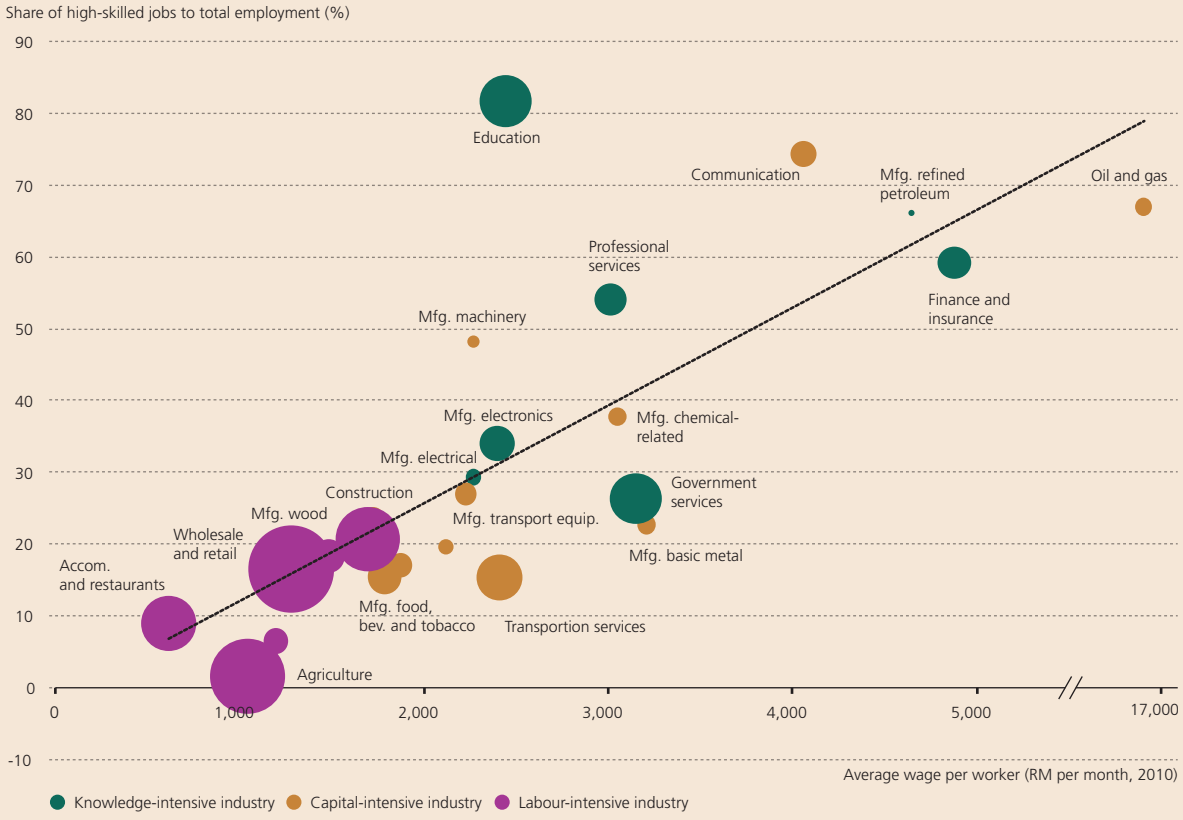
Source: Department of Statistics, Malaysia and Bank Negara Malaysia estimates

[2] The classification of labour-intensive, capital-intensive and knowledge-intensive industries was adopted from McKinsey's 2012 report on global labour market development.

[3] The labour-to-capital and capital-to-labour ratios are proxied by taking the ratios of employment to fixed assets, and vice versa.

Chart 8

Positive Relationship between Share of High-skilled Jobs and Average Wage Per Worker



Note: Size of bubble represents the relative size of each industry's employment to total employment

Source: Department of Statistics, Malaysia and Bank Negara Malaysia estimates

The third category, the knowledge-intensive industries, refers to industries with large proportions of high-skilled[4] employees, such as the design and development of electronics and electrical products and professional services industries.

Chart 7 provides a snapshot of the adjusted labour income shares and average wages[5] across industries in Malaysia. Similar to the cross-country observations, the variations in labour income shares across industries do not necessarily correspond with the variations in average wage levels. For example, the share of labour income in the labour-intensive industries tends to be higher than average, but the average wage levels are lower than the national average. This may reflect the reliance of these industries on large groups of low-skilled, low-productivity workers, including low-skilled migrant workers[6], and their slow pace of technological adoption.

On the other hand, wages in some capital-intensive industries tend to be higher than average, despite the lower-than-average share of labour income. This can be observed particularly in

[4] High-skilled labour refers to employees in managerial positions, professionals, executives, technicians and associate professionals.

[5] In this article, wages and salaries are used interchangeably to refer to basic wages, bonuses, commission, overtime pay, dismissal pay and allowances, before the deduction of employee's contribution to the Employees Provident Fund (EPF), social security schemes and other deductions.

[6] The share of foreign labour is particularly high in the oil palm plantation (close to 80% of workforce) and in the construction and manufacture of wood-related products (36% and 31% of workforce in the respective industries). The national average share of foreign workers is 17% of total employment in 2013.

industries which utilise advanced and complex machinery and automation processes, and require fewer but mostly highly-skilled workers. The oil and gas, and petroleum-related products industries are examples of this category.

More interestingly, the knowledge-based industries have both higher-than-average wage levels and share of labour income. This is due to their dependence on a highly-skilled workforce, which command higher wages. As shown in Chart 8, given that high-skilled workers are typically more productive, the wages earned by these workers tend to be higher. This is also consistent with the earlier observations in the cross-country comparison.

Conclusion

In summary, the GDP by income approach captures the total income accrued to households and firms engaged in the productive activity of an economy. In Malaysia, on average, capital income constitutes the largest component of GDPI. The share of labour income, however, has been increasing gradually between 2005 and 2013. The analysis presented in this article reinforces the need for Malaysia to continue to focus on strategies to increase the average wage levels, with the effect of raising the share of labour income. This could be achieved through the promotion of high value-added economic activities and through attracting quality investments, particularly in the knowledge-intensive industries, which will create more opportunities for high-skilled, high-paying jobs. Equally important are strategies to increase productivity in all areas of economic activity through the adoption of more advanced technology and elevating the overall skill level of the workforce. Finally, a comprehensive development of high quality human capital remains paramount in the country's progress into a highly productive and high income economy.

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