



BACKGROUND NOTE

Using the System of National Accounts to Estimate a Country's Wellness Economy

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USING THE SYSTEM OF NATIONAL ACCOUNTS TO ESTIMATE A COUNTRY'S WELLNESS ECONOMY

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While wellness can refer to activities that do not have monetary transactions attached to them, such as certain spiritual, emotional, mental, and social activities, the reality is that many wellness activities are also economic transactions, and these comprise a country's wellness economy which we define as the economy attributable to wellness. We show how the system of national accounts can be used to estimate a country's wellness economy, and apply this method for selected developing member countries (DMCs) of the Asian Development Bank (ADB) over two time periods. This type of estimation is useful because it allows us to see the direction in which a country is headed in terms of the production of wellness goods and services, and how relevant these have become to that country's economy.

This statistical analysis of the wellness economy estimates it as a country's gross value-added (GVA) that is attributable to goods and services which are considered as wellness products, and compares the relevant numbers for two time periods for each country. There is a relatively small difference between a country's GVA and its gross domestic product (GDP). A country's GDP is equal to its GVA plus non-refundable product or sales taxes. These taxes constitute a very small percentage of GDP and are a function of product-specific value-added. Therefore, for all analytical purposes, we assume GVA is almost equal to GDP and use the terms interchangeably here.

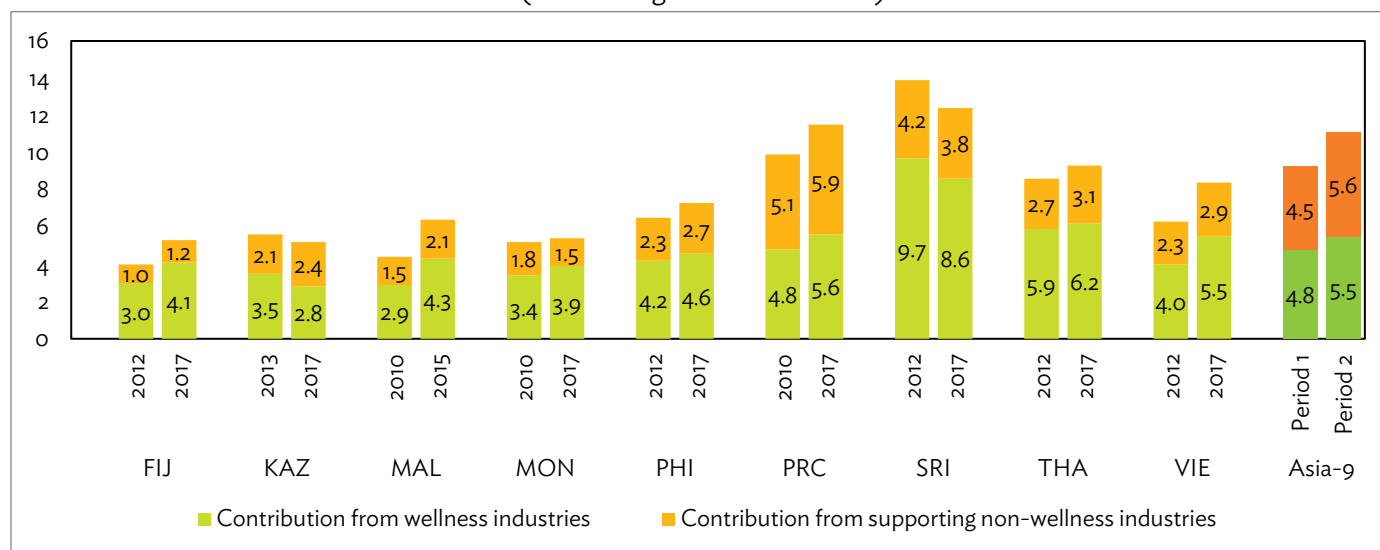
The first step in estimating a country's wellness economy is to identify which industrial codes in the International Standard Industrial Classification of All Economic Activities (ISIC), a United Nations industry classification system, pertain to wellness goods and services. These codes were selected to be as inclusive as reasonably possible of the different definitions and aspects of wellness, which were commonly discussed in past literature such as by Dunn (1959), the World Health Organization (2006), Roscoe (2009), and the Global Wellness Institute (2018). Broadly, these ISIC codes capture a variety of wellness goods and services from industries, such as human health, residential care, social work, tourism, amusement, recreation, sports, creative, arts, entertainment, culture, and personal care activities as well as the construction of wellness-related structures, such as health and sports facilities and the manufacture and retail trade of wellness goods such as pharmaceutical, beauty, and sports products.

The next step is to extract the GVA from national accounts which correspond to these ISIC codes. To this end, national supply and use tables or input-output tables (IOTs) were used. Whenever necessary, these tables, which are generally aggregated in terms of sectors and products, were further disaggregated to ensure that only the GVA attributable to wellness industries was captured. Depending on the availability and quality of data for each country, national accounts can be disaggregated in several ways, such as by using relevant source data from a country's national statistics office, using more detailed supply table rows to dissect aggregated columns in a use table, using firm-level data, or using data from economically similar donor countries.

The steps described above give only the GVA generated directly by industries that produce wellness goods and services. However, the wellness economy also includes the GVA attributable to non-wellness industries, such as electricity generation, the products of which are used in the production of wellness goods and services, and the value-added generated in the production of capital products needed to enable and support the production of wellness goods and services. These were accounted for by employing the methodology provided by de los Santos and Lumba (2020), which decomposes the final use vector from an IOT into value-added contributions made by different sectors of the economy.

This procedure was used to estimate the wellness economies for nine DMCs across two time periods each. These countries are Fiji, Kazakhstan, Malaysia, Mongolia, the Philippines, the People’s Republic of China, Sri Lanka, Thailand, and Viet Nam. Figure 1 shows the size of the wellness economy for each country at two different time periods as a percentage of each country’s total GVA. An orange bar shows the contribution from supporting non-wellness industries to the wellness economy; a green bar shows the contribution from the wellness industries themselves; and summing these two bars gives the estimated size of the wellness economy for each country in each year.

Figure 1: Wellness economies over 2 time periods
(% of total gross value-added)



FIJ = Fiji, KAZ = Kazakhstan, MAL = Malaysia, MON = Mongolia, PHI = Philippines, PRC = People’s Republic of China, SRI = Sri Lanka, THA = Thailand, VIE = Viet Nam, Asia-9 = Aggregate for the 9 DMCs.

Note: The 2 periods estimated for each country are not necessarily the same for all countries due to data limitations. However, looking at these figures together as a proxy for developing Asia, called Asia-9 here, can give an idea of how big the region’s wellness economy has become. This is done by summing the GVA attributable to wellness for all countries and dividing by the sum of their total GVA in each of the two periods.

Source: ADB estimates.

Generally, we see that the wellness economy’s share to total GVA has increased between the two time periods for each country, except for Kazakhstan and Sri Lanka. In these two cases, the percentages decreased, but this doesn’t mean that the wellness economy of each shrank in absolute terms, only that it grew slowly relative to the rest of the economy. In the People’s Republic of China, we see relatively large orange bars for both years, indicating that its wellness industries are relatively more developed and sophisticated with multiple non-wellness industries contributing to their production processes.

Besides examining how important each country’s wellness economy has become relative to its overall economy over time, we can also see how much wellness economies have grown in real terms. Table 1 shows the average annual growth rate for each country’s wellness economy GVA based on the periods estimated and after adjusting for inflation (base year 2010).

Table 1: Real average annual growth rates of wellness economies

Country	Average annual growth rate (%)
FIJ	10.2
KAZ	1.2
MAL	13.2
MON	9.3
PHI	8.6
PRC	10.5
SRI	1.3
THA	5.2
VIE	11.8

FIJ = Fiji, KAZ = Kazakhstan, MAL = Malaysia, MON = Mongolia, PHI = Philippines, PRC = People's Republic of China, SRI = Sri Lanka, THA = Thailand, VIE = Viet Nam.

Source: ADB estimates.

For each country, we see that the wellness economy has grown over the two time periods even after adjusting for inflation, with several (Fiji, Malaysia, the People's Republic of China, and Viet Nam) experiencing average annual growth rates exceeding 10% which, if sustained, would double each one's wellness economy in seven years from the initial period. Mongolia and the Philippines are also observed to have rapidly growing wellness economies at 9.3% and 8.6%, respectively. Generally, each country's wellness economy is growing faster relative to the overall economy.

Furthermore, we can treat these nine countries together as a proxy for developing Asia. This would imply that developing Asia's wellness economy accounts for over 11% of its total GVA and has been growing at 9.9% annually on average in recent years (when weighing by each country's total GVA). Given this proxy for developing Asia's wellness economy, it's also possible to derive the contribution of wellness to employment. Based on a procedure for input-output analysis discussed in Miller and Blair (2009), we estimate that 13.7% of total employment in developing Asia is attributable to the wellness economy in recent years.

In summary, this analysis demonstrates that the SNA framework can be used to produce detailed estimates of a country's wellness economy, and the methodology has potential applications beyond the estimation of wellness economies. The scope of this approach can be expanded to enable more comparable cross-country estimates over time and across countries, and by using data from sources such as ADB's multi-regional input-output tables and the World Input-Output Database, one can examine upstream and downstream linkages of the wellness economy with other sectors.

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