

Affordability of Cigarettes in Vietnam

Policy Note
November 2019

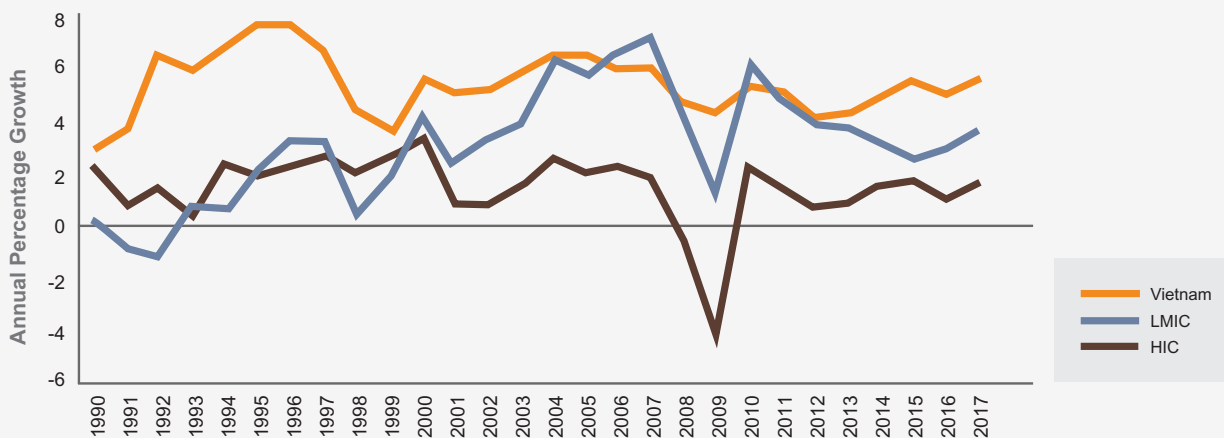
Why is Affordability Important?

Vietnam has experienced unprecedented levels of economic growth since the economic reforms of the late 1980s and early 1990s. Since 1990, per capita GDP growth rates for Vietnam have averaged 5.4 percent compared to 3.0 percent in low- and middle-income countries (LMICs) and 1.4 percent in high-income countries (HICs) (see Figure 1). As incomes rise, with all else being held constant, goods and services become more affordable. While this is positive in terms of increased consumption of most goods and services, it creates challenges for goods and services, like cigarettes, that generate negative externalities. Increases in affordability over time contribute to increases in cigarette use. Recent research by He, Shang, and Chaloupka (2018) shows that a decline in cigarette affordability results in declines in cigarette consumption.

As global attention in public health has shifted from HICs to LMICs, combined with the increasingly rapid economic growth rates experienced by LMICs, the affordability of tobacco products has received increased attention in tax policies aimed at reducing tobacco use. For example, the Guidelines for Implementation of Article 6 of the World Health Organization’s Framework Convention on Tobacco Control (2014) recommend that countries take into account economic growth and changing behavioral responses to tax increases “to make tobacco products less affordable over time [through] regular adjustment processes or procedures for periodic revaluation of tobacco tax levels.”

Affordability is the ratio between the price of a product and the income available to purchase it. Within the academic literature, there are two definitions of affordability of tobacco products. These definitions use broad and narrow measures of

Figure 1
Annual Per Capita GDP Growth



Source: World Bank World Development Indicators

income. The Relative Income Price (RIP) measures the percentage of annual per capita GDP required to purchase 100 packs of cigarettes. This is in contrast to the Minutes of Labour, which estimates the number of minutes a person must work to purchase a pack of cigarettes. Both measures have distinct advantages and disadvantages. The RIP method is often favored because it is able to generate the longest time series and comparison to the largest number of countries.

Affordability is relative rather than absolute. It is difficult to say that a product is affordable or unaffordable, it is more correct to say that a product has become more or less affordable over time.

Furthermore, comparisons of different countries at a single point in time can be misleading, since the between country variation in affordability is substantial due to different starting points as well as the variation in per capita GDP and prices between countries.

Trends in Affordability

Blecher and Van Walbeek (2004) were the first to comprehensively measure trends in cigarette affordability in countries around the world. They tracked the RIP in 70 countries between 1990 and 2001. Even though prices were higher in HICs than

LMICs, cigarettes were more affordable in HICs vis-à-vis LMICs. Furthermore, cigarettes had become less affordable in 17 of 28 HICs (61 percent), but the same could be said for only 18 of 42 LMICs (43 percent). An update extended the analysis to 2006 (Blecher and Van Walbeek, 2009), which found similar results. Alarming, cigarettes were becoming more affordable at an increasing rate in LMICs. Specifically, the inflation-adjusted prices had increased in 33 of 34 countries where cigarettes have become less affordable. However, inflation-adjusted prices had decreased for only 20 of 37 countries in countries where cigarettes had become more affordable.

For this policy brief the analysis of Blecher and Van Walbeek (2004 and 2009) has been replicated using identical data and methods to estimate the RIP in Vietnam between 1994 and 2017. Figure 2 shows the affordability in all countries measured in 2017. For Vietnam, in 2017, purchasing 100 packs of cigarettes required 5.3 percent of annual per capita GDP. EIU collects the prices of two brands (Marlboro or nearest equivalent and a popular local brand) in two retail environments. By convention, the cheapest brand in the cheapest retail environment for each country in each year is used.

Rising incomes in Vietnam have resulted in changes in the affordability of cigarettes.

Figure 2
Relative Income Price, 2017

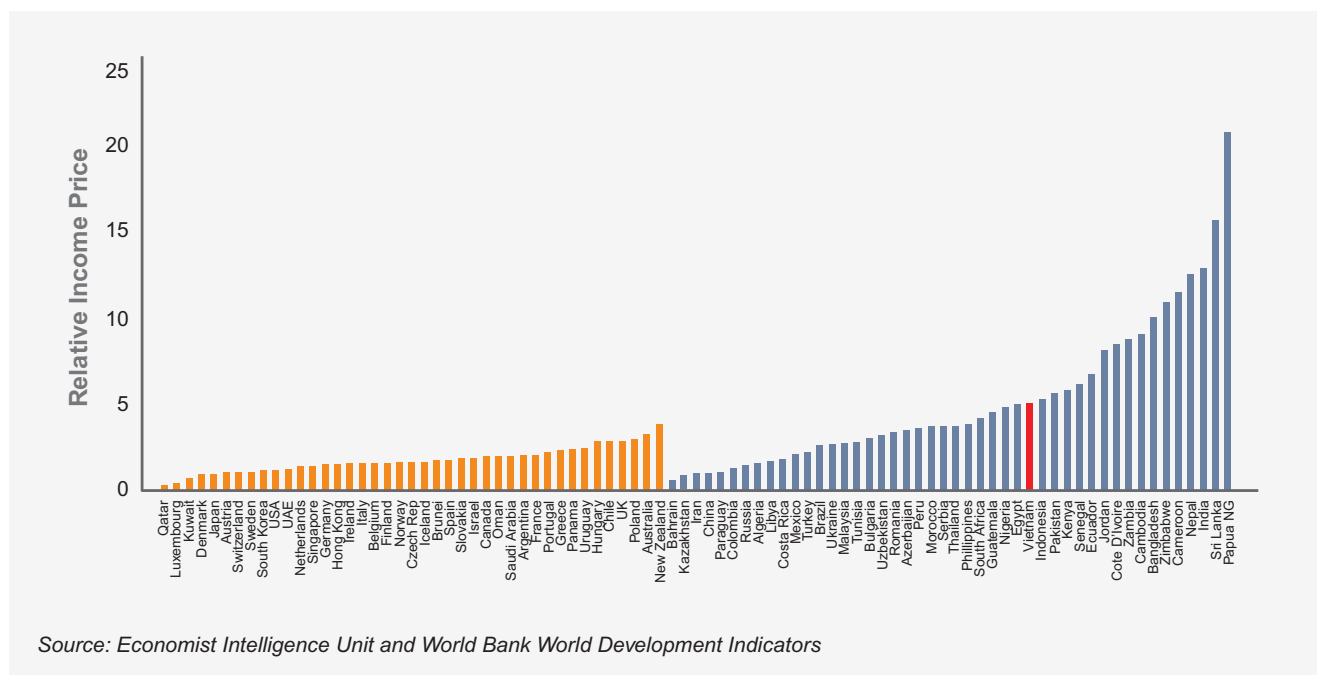


Figure 3 shows the trend via a time-series of “Relative Income Price in Vietnam”. Cigarettes became more affordable from 1994 onward, from requiring 31 percent of annual GDP to purchase 100 packs in 1994 to 5.2 percent in 2017. However, this trend flattened in the 2000s. Figure 4 decomposes the RIP, its two components, income and price,

presented in real terms (that is, inflation-adjusted). Although nominal cigarette prices have increased since 1994, real cigarette prices initially fell by 40 percent between 1994 and 2007; and have recovered since to be 6 percent higher in 2017 than in 1994. Interestingly, per capita GDP has grown by 542 percent from 1994 to 2017.

Figure 3
Relative Income Price in Vietnam and Low- and Middle-Income Countries

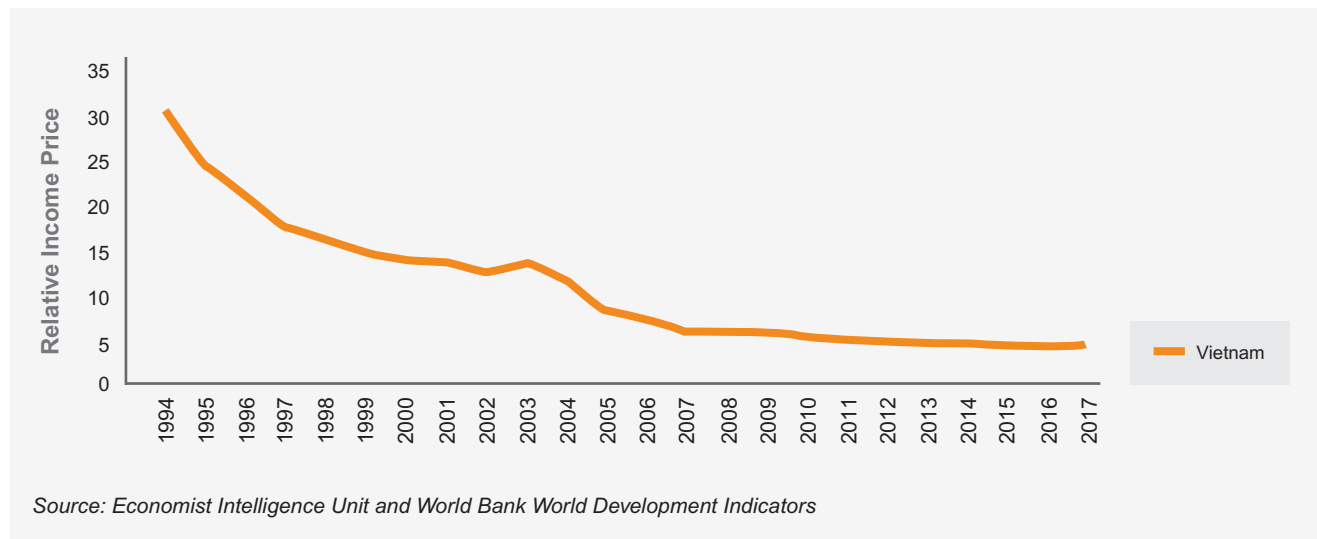


Figure 4
Decomposition of Relative Income Price in Vietnam

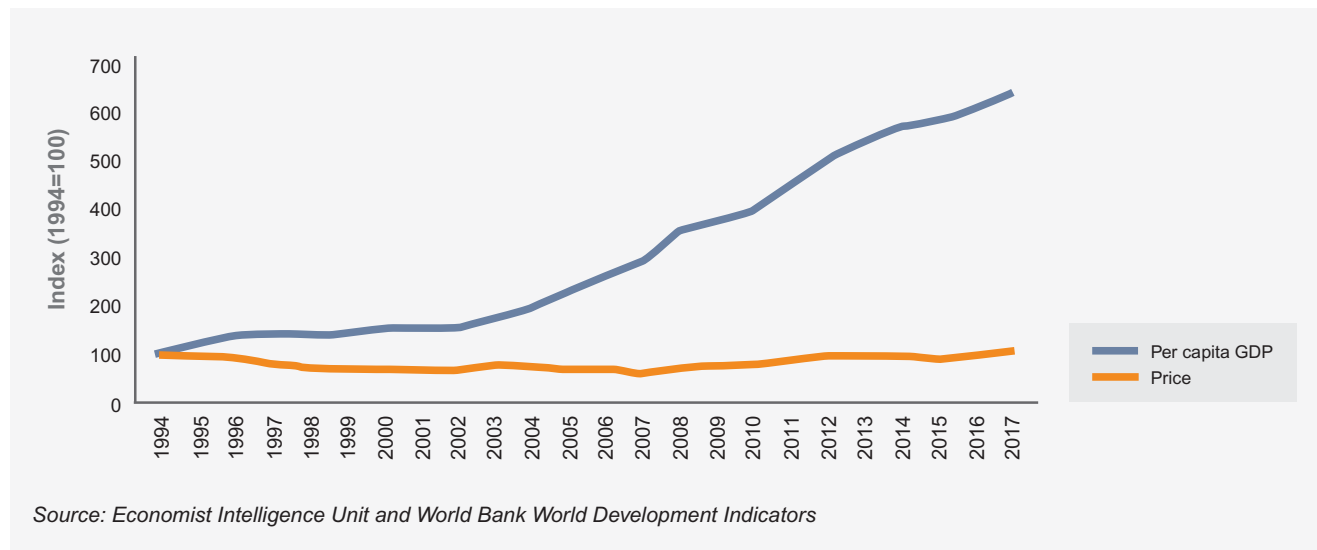


Table 1 shows the average annual percentage change in the RIP for the median LMIC and HIC using 8-year splits (1994-2002, 2002-2010, and 2010-2017). The table confirms the findings of Blecher and Van Walbeek (2004 and 2009) that cigarettes were becoming more affordable over time in the median LMIC, and at an increasingly rapid rate from 2002. However, a shift has occurred since 2010, where cigarettes have become less affordable. In HICs, the trend of cigarettes became less affordable over time as described by Blecher and Van Walbeek (2004 and 2009) has continued and even accelerated in recent years. It is important to highlight Vietnam in these tables, where cigarette affordability has increased. It is clear that cigarettes have become more

affordable over time in Vietnam. The trend has slowed in recent years, likely a result of increases in real prices as a result of tax increases. However, tax increases have not been sufficient to make cigarettes less affordable over time. Furthermore, this is compounded by the ad valorem tax structure which leads to under shifting of tax increases.

Case studies of affordability trends in countries which have raised tobacco taxes

Evidence shows that cigarettes have become more affordable in Vietnam due to rapid economic growth and insufficient price increases. Figures 5 and 6 show trends in affordability and sales volumes in two middle-income countries, South Africa and the Philippines, which have embarked on ambitious tobacco tax increases. Between 1961 and 1991, as a result of a decline in real taxes per pack, cigarettes became dramatically more affordable in South Africa, from 5.8 percent of per capita GDP required to purchase 100 packs in 1961 to 1.9 percent in 1991. As cigarettes became more affordable, sales increased, from 29 packs per person per year in 1961 to 50 packs per person by 1991. In 1991, however, the government instituted annual increases in excise taxes, which resulted in higher prices and reduced affordability. The RIP rose to 3.9 percent by 2001, coinciding with a rapid decline in sales by 44 percent to 28 packs per person per year. From 2001 to 2008,

Table 1
Average Annual Percentage Change in Relative Income Price

	1994-2002	2002-2010	2010-2017
HIC (median)	0.3%	0.0%	2.9%
HIC (average)	0.2%	-0.5%	4.1%
LMIC (median)	-1.9%	-5.7%	0.9%
LMIC (average)	-2.0%	-6.8%	1.5%
Vietnam	-10.1%	-11.8%	-2.4%

Source: Economist Intelligence Unit and World Bank World Development Indicators

Figure 5
Affordability and cigarettes sales in South Africa

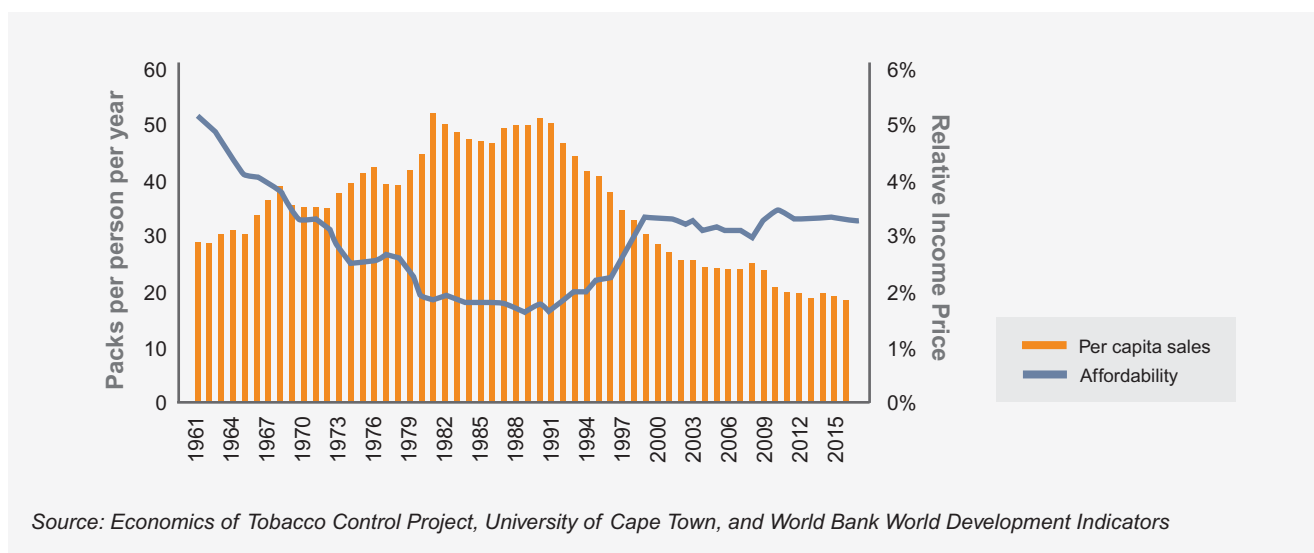
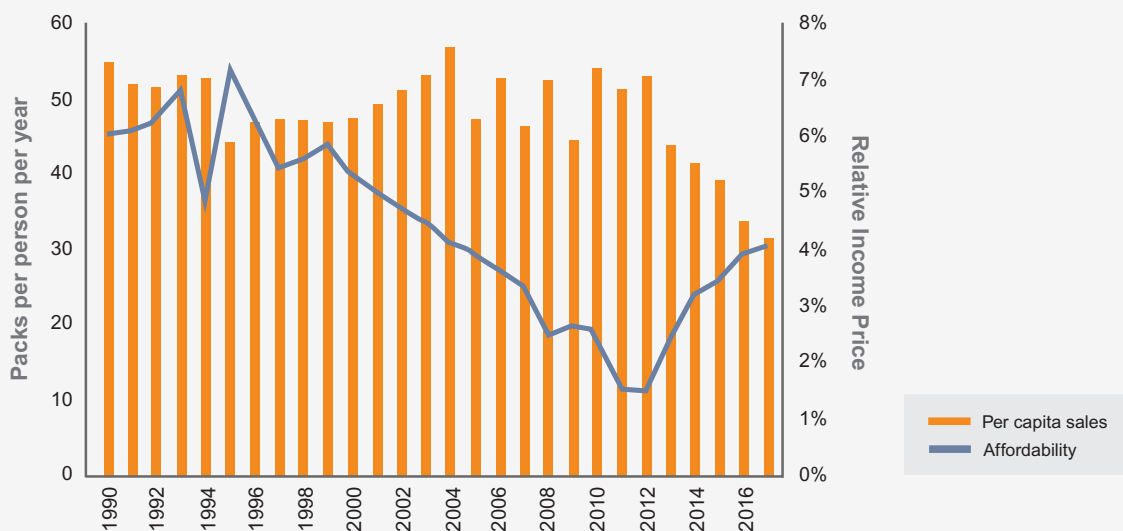


Figure 6
Affordability and cigarette sales in the Philippines



Source: Economist Intelligence Unit, World Bank World Development Indicators, Euromonitor, ERC, and Canadean

cigarettes became more affordable, albeit slowly, as tax and price increases were offset by higher economic growth, and sales rose again, slowly. However, as affordability declined from 2008 to 2011, sales again began to fall. The South African example shows the very high and rapid coinciding of cigarette sales and affordability.

Cigarettes became more affordable in the Philippines from 1990 until 2012 as weak tax policy and economic growth offset price increases. This increase in affordability coincided with relatively unchanged per capita cigarette sales. However, in 2012, the Philippines instituted large tax increases as well as structural reforms, which transitioned its four-tier tax system to a single-tier uniform specific tax over the next five years. The RIP increased from 1.5 percent in 2012 to 4.1 percent by 2017, coinciding with a decline in sales by 42 percent—from 53 packs per person per year in 2012 to 31 packs per person per year in 2017. The experience of the Philippines shows that increases in taxes and declines in the affordability of cigarettes cause large

declines in cigarette sales. It is important to note that both South Africa and the Philippines also experienced increases in tax revenue due to the relatively inelastic demand for cigarettes, combined with the best practice—uniform specific tax structures.

Policy recommendations

The analysis shows that cigarettes have become considerably more affordable in Vietnam since 1994. Even in recent years as cigarette taxes have increased, the tax and price increases have not been sufficient to make cigarettes become less affordable, rather than more affordable, over time. In order to ensure that cigarettes become less affordable over time, Vietnam needs tax increases that result in prices increases, which can outpace economic growth. This is not possible without tax structure reforms, such as a uniform specific tax (or mixed system) where the specific component is increased significantly over time.

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