A Reader’s Guide to the Keynes on the Consumption Function

Keynes proposed a theory of the output level of the economy as a whole in his *General Theory of Employment, Interest and Money* (1936). It is no exaggeration to say that this book transformed the world of economics. Today we take the macroeconomics that he created for granted and do not notice that many of its characteristic ways of thinking were originally quite controversial. One such tool of macroeconomics today is the “data” convention of dividing total output of the economy into spending on consumption and investment. To Keynes, his insights into what caused consumption to change was of such fundamental importance to him that he enshrined it in a formulaic relationship that he dubbed, “the consumption function.” And because this consumption function’s behavior determined how unstable output would be under changing investment levels, he called this characteristic a “Fundamental Psychological Law.”

In our short excursion into the data analysis of this relationship we are most interested in how to formulate and express both consumption data and its determinants. As you will see below, Keynes was intensely interested in the same issues. In his day, though, national data on the economy’s output, such as we also take for granted with the wide availability of the National Income and Product Accounts, were still in their infancy. Our excerpts from the *General Theory* see Keynes exploring two issues. 1) What units are appropriate to a macroeconomic level of analysis? 2) What variables that are causally related to aggregate consumption.
Chapter 4. The Choice of Units

What’s of interest here is Keynes’s posing of a sort of data question that should probably be asked more often. That is, are such-and-such data really meaningful? Do they in fact measure what they are supposed to measure? When we see numbers presented to, say, 6 significant digits, is the implied precision appropriate or does it go beyond what can reasonably be claimed, given how the data were constructed?

In modern macroeconomic discussions, two key variables that are bandied around a lot are “real GDP” and “the price level.” We quite often see long time-series given for these variables. But in this chapter Keynes argues that neither of these measures are well-defined outside of the short run. Apparently most macroeconomists these days think that Keynes was overly scrupulous, yet his arguments deserve attention. Think back to introductory macro. How do we define “real output of the US economy” when the mix of products is changing year by year (and changing quite radically decade by decade)?

Keynes comes down in favor of two macroeconomic measures that, he claims, are less “fuzzy” than real output and the price level, namely sums of money and sums of labor-time.

Question: How might one criticize Keynes’s idea that “hours of labor” constitute a unit of measure that is truly homogeneous over time?

Chapter 8. The Propensity to Consume: I The Objective Factors

Returning to the main theme of his book after the Book II excursions into units and expectations, Keynes is again taking up the question of what determines the volume
of employment. So far he has characterized it in general as determined by the aggregate supply and demand functions. He emphasizes he is mainly interested in aggregate demand, since supply can be assumed familiar to economists (particularly those brought up on the classical teachings). In Book I, he defined aggregate demand as made up of the proceeds expected from sums spent on consumption and investment. Since the factors which govern these quantities are largely distinct, they will be treated separately, starting in this section (Book III) with the factors governing consumption, followed by a discussion of investment (Book IV).

The proper units in which the aggregate demand for consumption should be considered are the sum spent on consumption (C) in money and the level of employment (N). For us, as modern readers of Keynes, it is more intuitively natural to think of C in real terms as a function of real income. All of the casting of his argument in wage unit terms is Keynes’ peculiar method of converting nominal values into real values by deflating them by an index of the cost of a unit of labor.

Cataloguing the argument to come, then, Keynes claims that an inclusive list of all the possible influences on C are (i) the amount of aggregate income, (ii) other objective factors and (iii) the subjective needs and psychology of the public and the distribution of income. Although in fact these are all tied up together, we can for purposes of analysis divide them up for separate analysis. This is the rationale for the division of this chapter and the next. In general the assumption is that matters of social custom, taste and historical circumstance will figure largely into the amount that a country consumes out of a given income, but that these “subjective factors” can be considered the product of past social evolution and can for the short period be considered
given and stable. This leaves the determination of the level of investment open to the objective factors.

II

This section is Keynes’ catalogue of objective factors capable of affecting the level of consumption spending.

1) A change in the wage unit. This essentially refers to the issue of nominal versus real wages. If the wage unit changes and so the real value of a given money wage change, then consumption will be effected. As long as the consumption function is defined for real income and real consumption this matter is taken care of.

2) The difference between income and net income. This is a matter of accounting for depreciation in the definition of national income (recall GNP versus NNP in our review of the NIPA categories). It is a trivial point, don’t waste your time on it.

3) Windfall changes in capital values. This relates to the idea of changes in wealth affecting the propensity to consume out of a given income. An example would be, for instance, the effect of the recent stock market crash on consumption spending. Does the fact that financial balance sheets are dramatically altered (a windfall), with no change in current income, alter the amount of spending out of income? Keynes thinks it is quite possible that this may be important. But recent experience tends to show a prominent example of this. The spending of wealthy U.S. income earners was recently greatly extended by the late nineties run-up of stock prices. So far during this recession the downward effect on consumption of the collapse of stock prices since 2000, has been a worry of the Federal Reserve. It’s dramatic lowering of short term interest rates may
have offset this depressing effect for the last two years, particularly by fueling a vast amount of home mortgage refinancing. Thus even though the recovery has yet to show itself, and will not do so until private investment spending resumes, the cheeriest macro news of the last two years has been the American consumer spending levels. The worry about this trend is that it is coming at the cost of increasing consumer indebtedness. Unless growth returns to levels consistent with lower unemployment, this could come back to haunt us.

4) Changes in time preference. Here Keynes is taking on the classical theory of consumption and saving. By that account, all such “inter temporal” decisions were just a matter of the preferred rate of trading current consumption for future consumption. Elsewhere in the book, Keynes rails against this doctrine, particularly its unthinking presumption that total output is constant while such changes in savings and consumption are worked out. He felt this led to a disastrous neglect of the fact that output did indeed change and that such changes were not the result of changes in time preference mainly, but of changes in current levels of activity, of real output and employment changing. Keynes’s final assessment: “The influence of this factor on the rate of spending out of a ‘given’ income is open to a good deal of doubt.”

5) Changes in fiscal policy. This essentially refers to the idea of taxation and government spending. In general, Keynes’ view is that income taxation will increase the propensity to consume in two ways. If the return from saving is to be taxed away there is less inducement to save. And if the proceeds of taxation constitute a redistribution scheme from low income (high propensity to consume) groups, to high income (low
propensity to consume groups), this will increase aggregate consumption out of any given level of income.

6) Changes in expectations of the relation between present and future income. This falls under the heading of life-cycle plans for consuming and saving. Some age groups will save more than others. Generally it is considered by Keynes to cancel out at the aggregate level. But thinking of the current disparity in age groups associated with the baby boom phenomena, this may be more relevant today.

Considering all of these taken together:

We are left, therefore with the conclusion that in a given situation, the propensity to consume may be considered a fairly stable function, provided we have eliminated changes in the wage unit in terms of money.

The fact that, given the general economic situation, the expenditure on consumption in terms of the wage unit depends in the main on the volume of output and employment is the justification for summing up the other factors in the portmanteau function, ‘the propensity to consume.’ (pp. 11-12)

III

Given that the propensity to consume can be a fairly stable function \[C = C(Y, \text{etc..})\], the next question is what is the shape of this function. Keynes takes it on intuition
and casual observation that it will exhibit a characteristic which turns out to be so important for this theory that he dubs it his “Fundamental Psychological Law:”

The fundamental psychological law, upon which we are entitled to depend with great confidence both a priori from our knowledge of human nature and from the detailed facts of experience, is that men are disposed, as a rule and on the average, to increase their consumption as their income increases, but not by as much as the increase in their income.

As we have seen from our own development of the consumption function Keynes insight here was quite sound. In literally thousands of empirical studies the slope of the consumption function (the marginal propensity to consume) is found to be positive and less than one. Keynes also feels that this slope may taper off at high income levels (both across income classes, but more importantly for the community as a whole). Thus a more wealthy community will save a greater proportion of its income than a less wealthy one. This is interesting but not essential. All that the rest of this theory will require is the range of the marginal propensity to stay within the bounds set by the fundamental psychological law.

IV

This section is a diatribe, based on the consumption function, against the notion prevalent in the 30s that the only way to fight the depression was by a policy of sound finance. This need not concern us at this stage, so just skim this section. What is perhaps most interesting is the data tables on the collapse of investment in the 30s. Looking at
this it is easy to see how Keynes came to regard fluctuations in business investment spending as the major source of cyclical macroeconomics performance. Do read pages 104 to 106 though, as they are a very nicely-done summary of the issues raised in this chapter.

particularly at the end there is a strong sense in this chapter of the ever present influence of time on the economic problem. Discontinuous capitalistic production requires future provision (from production today) of capital goods to capture the enormous productivity of the division of labor. Thus we get Keynes’ twist on the great theme of economics from Adam. Smith onwards: the important role of saving and accumulating for productivity and growth. The provision for the future is only beneficial today, Keynes is telling us, if it can generate enough employment to keep past provisioned capital and labor at work. The greater the productivity of the vast economic machine in “potential,” the greater the risk of partial idleness of that machine in actuality. This paradoxical potential for idleness is Keynes’ explanation of poverty in the midst of plenty. Further, this potential for idleness is exacerbated if the financial forms of saving for the future have no definite counterpart in the “real” provision for the future. Hence thrift in and of itself is no good. What is needed is production and consumption.