Economics 101: Basic Economic Principles
Professor Clark
Problem Set #8 (due by **at the beginning of class on Wednesday, the 30th of April)**
Your explanations must be type-written, including your equations. Your diagrams can be hand-drawn. You are welcome to work with a partner and turn in one problem set.
AD&AS Analysis: Chapter 32

1. Discussion Question #7 on p. 640 from the textbook: "Use shifts of the AD and AS curves to **explain** (a) the U.S. experience of strong economic growth, full employment, and price stability in the late 1990s and early 2000s and (b) how a strong negative wealth effect from, say, a precipitous drop in house prices could cause a recession even though productivity is surging." Be sure to explain in your own words. (Hint: review the diagrams in chapter 32 of shifts in AD and AS.)

2. The Case Study of Spain in the Aftermath of the 2008 Financial Crisis:

Consider the attached article by Raphael Minder, "Saying No to Austerity, Spain Unveils Tax Cuts" from June 2014. In this article, the author explains that the then recently elected Prime Minister in Spain, Mariano Rajoy, was abandoning the austerity policy that favored cuts in government spending (lower G in our model) and higher taxes (higher T in our model). After winning the election in 2011, the new government began to adopt an alternative policy of lowering taxes in order to boost aggregate spending and thus output in the Spanish economy. The government continued this policy in 2015 and 2016, introducing new tax cuts for both corporations and households. The goal was to increase both investment and consumer spending in order to boost GDP further and lower the country's still very high unemployment rate (of almost 26%).

A) Illustrate on an Aggregate Demand/Aggregate Supply diagram the level of employment and output in the Spanish economy in 2014 in comparison to the full employment level of output.

B) Now let's analyze one part of the Spanish government's new policy: its decision to lower taxes paid by households. The government wants to increase Aggregate Demand by 400 billion euros by lowering lump sum taxes. Given the following estimates for the Spanish economy, by how much should the Spanish government cut lump sum taxes?

a (autonomous consumption expenditures) = €150 billion,
b (marginal propensity to consume out of disposable income) = 0.80
T (lump sum taxes) = €50 billion
I = €300 billion, G = €100 billion
X = €40 billion, M = €50 billion

C) **Explain** and **illustrate** the effects of the policy on your AD/AS diagram. Be sure to fully label your diagram and <u>include an explanation</u>.

D) **Extra Credit:** If AD increases by 400 billion euros, the equilibrium level of GDP (i.e., the new output level at which AD = AS) will increase by 400 billion euros. True or False. **Explain** in a couple of sentences.

The New York Times

Saying No to Austerity, Spain Unveils Tax Cuts

By Raphael Minder

June 20, 2014

MADRID — Turning its back on fiscal austerity, the Spanish government presented a broad package of income and corporate tax cuts on Friday that are scheduled to begin before next year's general election.

The cuts roll back some of the tax increases that Prime Minister Mariano Rajoy began putting into effect shortly after his conservative Popular Party swept to power in 2011 by winning a parliamentary majority. The next election is scheduled to take place by November 2015.

Under the plan introduced on Friday, which covers 2015 and 2016, taxpayers would pay an average of 12.5 percent less in income tax by the end of that period. Over the two years, corporate taxes would be reduced about five percentage points.

Cristóbal Montoro, Spain's budget minister, told reporters on Friday, "The time has come to lower taxes for everybody."

But even as Spain's economy shows signs of improvement, its unemployment rate remains stubbornly close to its record level, at 26 percent. Mr. Rajoy also faces political challenges,

Mr. Montoro forecast that cutting taxes would increase both investment and consumption, helping to increase Spain's gross domestic product and keeping the country on track to meeting its deficit targets.