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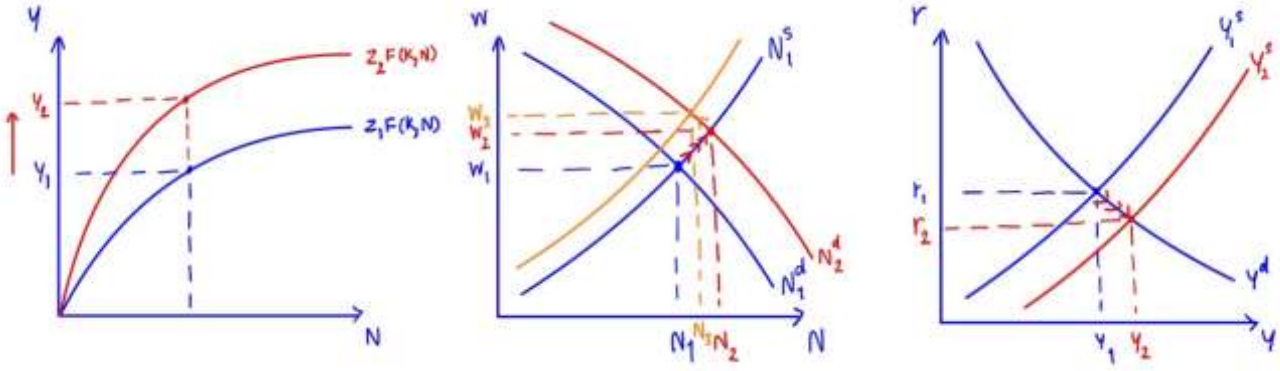
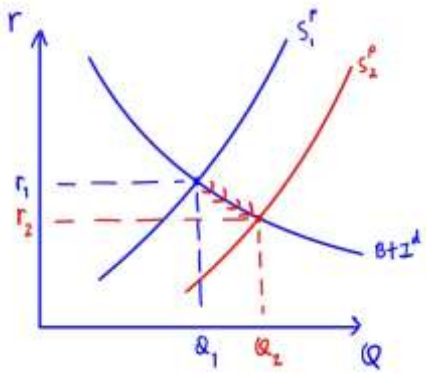
Nuclear power plant and the economy

The nuclear power plant was first introduced in late 1950 after scientists start to turn their attention to energy technology development. The advancement of the nuclear power plant has gained a lot of attention due to its cheap fuel and the efficiency of electricity production in the long-term, many countries have adopted the technology. Nowadays, there are 450 nuclear reactors in operation in 30 countries, the data collected suggest, the nuclear energy industry has played an important role in job creation and economic growth. The nuclear power plant has a lot of parts and building in order to operate, in other words, it's a large facility, once built, it requires a lot of labor force to operate.



The advancement of technology has driven down the cost, therefore, increase productivity function and output(Y1 to Y2) also the marginal product of labor so firms will invest more. The increase of nuclear power facility with the need for operator also drives up the demand for labor from Nd1 to Nd2 causing real wage to increase from w1 to w2. Output supply increase(shift to the right), therefore, real interest rate decreases from r1 to r2. The decreases of real interest rate causes labor supply to decrease(Ns1 to Ns2) since people values working hour less and consume more. For credit market, people consumption increases less than income(consumption smoothing) and save the proportion of it which increases private saving from Sp1 to Sp2.



Overall, Wage(w) increases, Investment(I) increases, Consumption(C) increases, Real interest rate(r) decreases, Working Labor(N) increases, and Income(Y) increases.