

## Power concentration and efficiency

You can assume that each individual has a will to increase power. They may say they are not interested in power, but you can assume this is just a conscious or subconscious facade to reduce risk of being victim of a future power struggle.

This individual will to power is a natural factor of power concentration in society, since you can assume that the more power you have, the easier it is to gain additional power. Similarly, the more money you have the easier it is to gain additional money. The reason is that with a certain power  $P$ , you can utilize a system to use that power  $P$  to gain additional power where the effects of this system is better than proportional to the power  $P$ , over the years. You can see it as an interest (and interest on interest) on a bank account.

Imagine a yearly increase change of  $k \cdot 100$  percent, how is this reflected on the total power after some years?

Mathematically this can be expressed,

$$P(t) = P_0 \cdot (1+k)^t \quad (1)$$

$$dP(t) / dt = P_0 \cdot \ln(1+k) \cdot (1+k)^t \quad (2)$$

where  $P_0$  is a measurable quantity of initial power and is a function of time  $t$ , and  $k$  is a positive constant. In a bank account,  $k$  is the yearly interest and  $t$  is on a yearly scale. If you are not familiar with derivatives, the first part of (2) expresses the rate of change at a particular time. As you can see, the rate of change is exponential.  $\ln$  is the natural logarithm.

If you want to calculate  $k$  when you know  $P_0$  and  $P_{\text{final}}$  and  $t$  years, the interest over the years is,

$$k = e^{(\ln(P_{\text{final}}) - \ln(P_0)) / t} - 1 \quad (3)$$

In reality, you always need to spend outside the gain system (and with a local  $k$  of -100% or -1) and cannot reinvest all gain; the less you spend (and thus rather reinvest the savings into the gain system), the higher the  $k$ . The important part is the average  $k$ , which you get from  $P_{\text{final}}$  and  $P_0$  and time  $t$ .

However, this factor is not the only factor of power in society, making equation (2) less applicable in real life. There are other factors which mitigate this factor (which still is a real factor, though). Without this mitigation we would see power concentration much more quickly.

Such other factors have lead to unions being created. Such other factors have lead to democracy to be strong force. Such factors have also lead to regulation such as antitrust regulation. Social emotional factors such as "Who do you think you are?", envy, empathy for the

weak, disgust for the rich (in money or power) and reasoning factors such as “Is this really in my interest?”, “What if I became a victim of power?”, “Lets organize us and fight in our own interest.” all are mitigating factors.

Inflation is a natural mitigating factor when it comes to money on bank accounts, since inflation can be described as a negative interest of the real worth of money. However if the money is invested in inflation compensated investments, e.g. attractive real estate (where rents, and thus return on investment, rise with inflation), this mitigating factor is diminished.

As you can see from equation (2) if real interest is negative, e.g. natural logarithm of a number less than 1, makes this  $\ln(1+k)$  a negative constant. Thus the power  $P$  decreases exponentially negative tending towards zero as time goes on.

When you compare investments between inflation compensated and no compensation, there can be a big difference. E.g. if you consider a price of real estate at a 5% return on investment, the valuation of the real estate could be  $1/0.05$ , or 20 times the return (This is a rough version of real estate valuation, when return on investment goes towards zero the valuation becomes unrealistic; in real terms you always compare what return you can get at other types of investment, thus even negative returns on investment can be the best choice, if alternatives dictate this). However when comparing this 5% with the interest on a bank account, you need to consider the inflation. If inflation is 5% then the real currency return on investment compared to bank account is 5% (nominal return on investment at a particular year) + 5% (inflation part that the rents always increase with) = 10%. Over enough time, this is a huge difference between real estate investment and bank account.

All in all, since the power increase is exponential for a certain constant  $k$ , it is clear that with time, the one with largest initial power  $P_0$  and  $k$  in combination according to (2) will gain more yearly at the cost of the others; this is a clear factor in power concentration. To achieve the constant  $k$ , you need a good working system that achieves this. Over a period of 100 years, the difference between 3% and 5% is a factor of 112, thus  $P_0$  can be less than 100 times for the one with 5% increase yearly, and still beat the one with initial  $P_0$  a hundred times larger but with 3% increase.

### **Effects of power concentration**

Now that it is clear that societies tend towards power concentration (at least there is a powerful factor for this), what are the effects of power concentration?

The most obvious one is that more human resources (work, thinking and natural raw materials) are spend towards keeping power of the concentrated power rather than on the welfare of the people in the society, since this shift of spending is directly advantageous and beneficial of those with concentrated power.

In a market economy, one can see this type of spending as resulting in the financial services sector growing large.

In the political landscape one can see resources spent on security and armed internal and external forces. Since loyalty is essential in power preserving, the hiring of friends and family (nepotism - common in African states) is essential, and these persons know that their loyalty is really what matters, thus at the cost of skills that are wanted by society to run the society. If they get too good at the skills, and show this, then they naturally become a threat; thus this system self regulating towards poor management in terms of value to the society; however value to the power top is there in terms of loyalty (you know really why you were hired).

What's true in both in the market and political landscape is the paycheck hiring of people to secure the top personal power in a company or party; since power is linked with how you are portrayed, resources are put in the internal and external propaganda department (both to portray a nice surface of the top and to dirty the facade of the threats to the power).

Thus power concentrating leads to less efficiency for the society in terms of living standard.

### **Personal**

Power comes in many shapes and forms, are separate and joined, in patterns all across the world; the child within you will help you become a victim.