

# Surplus, Interest, Debt: Personal Finance in a Nutshell

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*Key Words: Surplus, Interest, Debt, Income, Expense, Compound Interest, Investment*

Far too many people are living beyond their means. Many of us are spending more money than we make. Many of us are living inflated lifestyles supported by debt. Far too many of us are not prepared for unemployment or economic disruptions. A large group of us are not prepared for even minor financial emergencies. Many workers are not saving enough for retirement. Somewhere along the line, a vast majority of us—including high-income earners—have not been taught how to think properly about money or to transcend the cycle of debt and perpetual want.

There is a better way. It begins by thinking properly about **surplus** and **interest** and the dangers of **indebtedness**. We then can learn how consistent saving over time can take part in the grandeur of investment and compound interest. Albert Einstein called compound interest “the greatest mathematical discovery of all time.”<sup>1</sup> When money is mixed with time, good things can happen. As such, we may benefit from a renewed understanding of the words **surplus**, **interest** and **debt**. We can begin with a very basic socio-economic classification of people based on these concepts.

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## Four Economic Classes of People (*Which one are you?*)

1. **The Destitute:** The truly forgotten men, women and sometimes children. They are homeless and often helpless. They need our empathy, respect and assistance to secure food, shelter, clothing and fuel.
2. **The Dependents:** They rely on others including the government or family for the majority of their personal maintenance and support.
3. **The Poor:** They pay **interest**.
4. **The Rich:** They receive **interest**.

Everyone has income and expenses. When our expenses are higher than income, we have debt. When the income is higher than our expenses, we have a surplus (Income + Expenses = **Surplus** or **Debt**). It is a simple concept that even a child can understand. Whatever one’s circumstances, the key concept is to create a surplus and to then build financial security from there forward.

“Compound interest is the eighth wonder of the world. He who understands it, earns it...He who doesn’t...pays it.”

—Albert Einstein

- Things to do:**
1. Create a **surplus**. This can happen on any income.
  2. Direct **surplus** for short-term cash reserve (\$1000, then 3 months expenses)
  3. Use **surplus** to pay down **debt**, start with credit cards, cars, education, home.
  4. Use **surplus** to build savings and then investments to start receiving **interest**.

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*Education Charts: Compounding Interest and Growth Rate Returns*

*Take a look at Chart 1 (see Page 3). Starting at age 19, Investor A contributes \$2,000 per year for eight years (\$16,000 total) and then invests the money until retirement (39 years more). In contrast, Investor B did not start investing until age 27 at \$2,000 per year for the next 39 years (total investment \$78,000). The charts show returns for each investor assuming average annual returns of 6%, 8% and even 10%. Receiving interest over time can be rewarding.*

*Take a look at Chart 2 (see Page 4). This chart shows how many years it takes an investment of \$10,000 to double given the interest rate/portfolio returns it can achieve. It is clear from the chart that getting to 6% per year or greater returns is important for accelerating investment growth.*

The power of compounding interest is one of the finest natural laws, and it does not discriminate. To begin to achieve its benefits, start by generating a **surplus**. When you increase your lifestyle to consume your present income and even leverage that position through heavy debt loads, then your expenses exceed your earnings and you have no surplus (negative surplus = debt). With no surplus, you forfeit the opportunity to pay down debt and eventually build wealth through receiving interest. Somebody else is getting richer while you are a slave to **debt**. The future is uncertain if people do not understand nor are taught personal financial management. It is really simple and basic: *If your inflow is less than your outflow, then your upkeep is contributing to your downfall! Your earning power must be greater than your yearning power!*

In a world plagued by debt spirals, many people have never been taught about the wonderful effects of living with a **surplus** and the magic of receiving **interest** rather than paying it. Consistent surplus and effective investment including owning your own home is the most defensible way to build financial security and even wealth over time. The key to becoming more financially healthy and independent is to begin to think differently and to have a plan to get out of debt. This can be done on any income. We can start with a surplus mentality and build our financial future on that solid foundation.

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<sup>1</sup> “Investing 101: The Concept of Compounding,” Investopedia, found at <http://www.investopedia.com/university/beginner/beginner2.asp>

Chart 1: Compound Interest & the Time Value of Money

Future Value for Investor A who invests \$2,000 a year for the first eight years (for a total of \$16,000) and Investor B who invests \$2,000 per year for the remaining 39 years (for a total of \$78,000)												
Age	Investor A		Investor B		Investor A		Investor B		Investor A		Investor B	
	Tax Deferred Compensation	Year-end Value	Tax Deferred Compensation	Year-end Value	Tax Deferred Compensation	Year-end Value	Tax Deferred Compensation	Year-end Value	Tax Deferred Compensation	Year-end Value	Tax Deferred Compensation	Year-end Value
19	2,000	2,120	0		2,000	2,160	0		2,000	2,200	0	
20	2,000	4,367	0		2,000	4,493	0		2,000	4,620	0	
21	2,000	6,749	0		2,000	7,012	0		2,000	7,282	0	
22	2,000	9,274	0		2,000	9,733	0		2,000	10,210	0	
23	2,000	11,951	0		2,000	12,672	0		2,000	13,431	0	
24	2,000	14,788	0		2,000	15,846	0		2,000	16,974	0	
25	2,000	17,795	0		2,000	19,273	0		2,000	20,872	0	
26	2,000	20,983	0		2,000	22,975	0		2,000	25,159	0	
27	0	22,242	2,000	2,120	0	24,813	2,000	2,160	0	27,675	2,000	2,200
28	0	23,576	2,000	4,367	0	26,798	2,000	4,493	0	30,442	2,000	4,620
29	0	24,991	2,000	6,749	0	28,942	2,000	7,012	0	33,487	2,000	7,282
30	0	26,490	2,000	9,274	0	31,257	2,000	9,733	0	36,835	2,000	10,210
31	0	28,079	2,000	11,951	0	33,758	2,000	12,672	0	40,519	2,000	13,431
32	0	29,764	2,000	14,788	0	36,459	2,000	15,846	0	44,571	2,000	16,974
33	0	31,550	2,000	17,795	0	39,375	2,000	19,273	0	49,028	2,000	20,872
34	0	33,443	2,000	20,983	0	42,525	2,000	22,975	0	53,930	2,000	25,159
35	0	35,450	2,000	24,362	0	45,927	2,000	26,973	0	59,323	2,000	29,875
36	0	37,577	2,000	27,943	0	49,602	2,000	31,291	0	65,256	2,000	35,062
37	0	39,831	2,000	31,740	0	53,570	2,000	35,954	0	71,781	2,000	40,769
38	0	42,221	2,000	35,764	0	57,855	2,000	40,991	0	78,960	2,000	47,045
39	0	44,754	2,000	40,030	0	62,484	2,000	46,430	0	86,856	2,000	53,950
40	0	47,440	2,000	44,552	0	67,482	2,000	52,304	0	95,541	2,000	61,545
41	0	50,286	2,000	49,345	0	72,881	2,000	58,649	0	105,095	2,000	69,899
42	0	53,303	2,000	54,426	0	78,711	2,000	65,500	0	115,605	2,000	79,089
43	0	56,501	2,000	59,811	0	85,008	2,000	72,900	0	127,165	2,000	89,198
44	0	59,892	2,000	65,520	0	91,809	2,000	80,893	0	139,882	2,000	100,318
45	0	63,485	2,000	71,571	0	99,154	2,000	89,524	0	153,870	2,000	112,550
46	0	67,294	2,000	77,985	0	107,086	2,000	98,846	0	169,257	2,000	126,005
47	0	71,332	2,000	84,785	0	115,653	2,000	108,914	0	186,183	2,000	140,805
48	0	75,612	2,000	91,992	0	124,905	2,000	119,787	0	204,801	2,000	157,086
49	0	80,148	2,000	99,631	0	134,898	2,000	131,530	0	225,281	2,000	174,995
50	0	84,957	2,000	107,729	0	145,689	2,000	144,212	0	247,809	2,000	194,694
51	0	90,055	2,000	116,313	0	157,345	2,000	157,909	0	272,590	2,000	216,364
52	0	95,458	2,000	125,412	0	169,932	2,000	172,702	0	299,849	2,000	240,200
53	0	101,186	2,000	135,056	0	183,527	2,000	188,678	0	329,834	2,000	266,420
54	0	107,257	2,000	145,280	0	198,209	2,000	205,932	0	362,817	2,000	295,262
55	0	113,692	2,000	156,116	0	214,065	2,000	224,566	0	399,099	2,000	326,988
56	0	120,514	2,000	167,603	0	231,191	2,000	244,692	0	439,009	2,000	361,887
57	0	127,744	2,000	179,780	0	249,686	2,000	266,427	0	482,910	2,000	400,276
58	0	135,409	2,000	192,686	0	269,661	2,000	289,901	0	531,201	2,000	442,503
59	0	143,534	2,000	206,368	0	291,234	2,000	315,253	0	584,321	2,000	488,953
60	0	152,146	2,000	220,870	0	314,532	2,000	342,634	0	642,753	2,000	540,049
61	0	161,274	2,000	236,242	0	339,695	2,000	372,204	0	707,028	2,000	596,254
62	0	170,951	2,000	252,536	0	366,871	2,000	404,141	0	777,731	2,000	658,079
63	0	181,208	2,000	269,808	0	396,220	2,000	438,632	0	855,504	2,000	726,087
64	0	192,080	2,000	288,117	0	427,918	2,000	475,882	0	941,054	2,000	800,896
65	0	203,605	2,000	307,524	0	462,151	2,000	516,113	0	1,035,160	2,000	883,185
Total Invested	(16,000)		(78,000)		(16,000)		(78,000)		(16,000)		(78,000)	
Net Gains	187,605		229,524		446,151		438,113		1,019,160		805,185	
Interest Rate =	6%				8%				10%			

Source: Adapted from Ned Davis Research Group

Chart 2: Years Needed to Double Investment (Compound Interest)

% Return	Original Investment \$10,000		Years Needed to Double Investment												
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%
Yr. 1	10,100	10,200	10,300	10,400	10,500	10,600	10,700	10,800	10,900	11,000	11,100	11,200	11,300	11,400	11,500
2	10,201	10,404	10,609	10,816	11,025	11,236	11,449	11,664	11,881	12,100	12,321	12,544	12,769	12,996	13,225
3	10,303	10,612	10,927	11,249	11,576	11,910	12,250	12,597	12,950	13,310	13,676	14,049	14,429	14,815	15,209
4	10,406	10,824	11,255	11,699	12,155	12,625	13,108	13,605	14,116	14,641	15,181	15,735	16,305	16,890	17,490
5	10,510	11,041	11,593	12,167	12,763	13,382	14,026	14,693	15,386	16,105	16,851	17,623	18,424	19,254	20,114
6	10,615	11,262	11,941	12,653	13,401	14,185	15,007	15,869	16,771	17,716	18,704	19,738	20,820	21,950	
7	10,721	11,487	12,299	13,159	14,071	15,036	16,058	17,138	18,280	19,487	20,762	22,107			
8	10,829	11,717	12,668	13,686	14,775	15,938	17,182	18,509	19,926	21,436					
9	10,937	11,951	13,048	14,233	15,513	16,895	18,385	19,990	21,719						
10	11,046	12,190	13,439	14,802	16,289	17,908	19,672	21,589							
11	11,157	12,434	13,842	15,395	17,103	18,983	21,049								
12	11,268	12,682	14,258	16,010	17,959	20,122									
13	11,381	12,936	14,685	16,651	18,856										
14	11,495	13,195	15,126	17,317	19,799										
15	11,610	13,459	15,580	18,009	20,789										
16	11,726	13,728	16,047	18,730											
17	11,843	14,002	16,528	19,479											
18	11,961	14,282	17,024	20,258											
19	12,081	14,568	17,535												
20	12,202	14,859	18,061												
21	12,324	15,157	18,603												
22	12,447	15,460	19,161												
23	12,572	15,769	19,736												
24	12,697	16,084	20,328												
25	12,824	16,406													
26	12,953	16,734													
27	13,082	17,069													
28	13,213	17,410													
29	13,345	17,758													
30	13,478	18,114													
31	13,613	18,476													
32	13,749	18,845													
33	13,887	19,222													
34	14,026	19,607													
35	14,166	19,999													
36	14,308														
37	14,451														
38	14,595														
39	14,741														
*70	20,068														

12 years to double an original investment @ 6% return

*\*Note: Fully Allocated Long-term Portfolios Have a Reasonable Expectation of Return between 6% per year and 8% per year.*

*Low interest rates around the globe have average portfolio returns at the lower end of the spectrum depending on risk profiles of each investor.*

*Although these estimates are based on long-term historical averages, there is no way to predict or guarantee future returns.*

**If your inflow is less than your outflow, then your upkeep is contributing to your downfall! Your *earning* power must be greater than your *yearning* power!**