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TIME REALLY IS MONEY

Albert Einstein once said that compound interest was the greatest mathematical discovery of all time. Perhaps Einstein only got it half right: Compound interest, along with *time*, is the most powerful force in the financial universe.

The examples I'm about to give will open your eyes to the awesome power of time, and should give you motivation to open a broker account (or at least begin making regular purchases of low-cost index funds) to begin your investing journey of a lifetime, and to think about how to maximize your CPF investments over a lifetime. If you're a teacher, you should read this to your class. If you're a parent, you should read it to your kids.

Time saves you money

Imagine you're a 21-year-old, just starting your first post-college job. The human resources director asks if you want to attend a seminar on maximizing your CPF investments. The correct answer? You should jump up and down, hug them, and scream, YES! YES! In almost no circumstance should you *not* begin saving and investing as soon as you begin earning income beyond your immediate needs-- and no, a new Mercedes is not an immediate need, contrary to Singapore myth.

Let's say you're looking to retire in about 40 years, at the age of 61. You've decided a nest egg of \$800,000 will do. By starting now and earning a modest 8% compound annualized growth rate (CAGR) over that time, you'll need to contribute \$2,859 each year to reach your goal. If you wait 10 years to start saving, however, you'll have to pump \$6,539 into your plan annually, or more than twice as much. Don't wait.

If you're able to achieve a 10% annualized return, roughly what the market has averaged over the years, you'll need to contribute only \$1,643 each year, but \$4,421 if you wait a decade.

Time makes you a better investor

Using the same example, a person starting at the age of 31 and earning 10% per

year can't match the returns of a 21-year-old starter earning 8%. In fact, the 31-year-old would have to earn better than a 12% CAGR in order to be able to contribute the same \$2,859 and still reach \$800,000 by the age of 61.

Put another way, beginning 10 years earlier in this example is like adding 4% per year to your investing skills, which is huge over the long term. *Starting early can make up for poor investing skills.*

Here's an even more powerful illustration. (As if you weren't convinced already!) Two 51-year-olds are talking at a party about their CPF savings plans:

EarlyBird Tan: I've earned a compounded rate of 8% over the past 30 years.

LateComer Low: What a coincidence, so have I!

EarlyBird: Yes, I started contributing \$2,500 a year when I was 21, but had to stop when I was 30. I've not contributed since, although the money continued to grow in my account.

LateComer: I, too, contributed \$2,500 a year! However, I didn't start until I was 30. So, now that we're both 51, I've been contributing for 21 years, and you contributed only nine years. How much is in your account?

EarlyBird: Let's see... \$169,723. How much is in yours?

LateComer (stunned): Uh.... just \$136,142.

The lesson is clear: Never talk to anyone named EarlyBird at a party. Oh, yes... and *start investing early.*

For, you see, gentle investor, the nine-year penalty is even more severe than you think. EarlyBird contributed a total of just \$22,500 over the nine years, while LateComer shelled out \$62,500 over 21 years -- and still came up well short.

The lesson became even clearer when the two suddenly sober party animals sat down with pencil and calculator. How many more years of \$2,500 contributions, LateComer wondered, would it take until he surpassed EarlyBird's total?

Assuming both continued to earn 8% annually, would it take three years? Five years? Well, no. In fact, after 10 more years -- 31 years after EarlyBird stopped contributing and LateComer started -- LateComer will *still* be behind, \$333,034 vs. EarlyBird's \$366,415.

Believe it or not, the story is still the same after the 50th year. And the 75th:

Year	EarlyBird		LateComer	
	Savings	Cum. Contr.	Savings	Cum. Contr.
9	\$33,716	\$22,500	\$0	\$0
30	169,723	22,500	136,142	52,500
40	366,415	22,500	333,034	77,500
50	791,071	22,500	758,109	102,500
75	5,417,627	22,500	5,389,275	165,000
99	34,354,155	22,500	34,354,634	225,000

Assumes 8% CAGR; no adjustment for taxes

It's not until the 99th year, *90 years after LateComer started pumping in \$2,500 annually*, that he will be able to surpass EarlyBird's total. At that point, LateComer will have contributed a grand total of \$225,000, compared to EarlyBird's paltry payout of \$22,500. And it's all because of EarlyBird's head start.

The lesson is clear: If you haven't started by now, you might as well forget about it because you'll never catch up. No, wait... I'm just kidding!

The lesson is... start investing early. If you're not socking some money away on a regular basis, *start now*. Every month you wait to begin will cost you big money many years down the road. The best time to start investing was yesterday. The next best time is today.

That doesn't mean you should rush right out and buy a bunch of stocks you haven't thoroughly researched. But it does mean you should take time TODAY to think carefully through how to maximize your CPF investments, and how to best invest a portion of your monthly salary. (With the usual caveat that this is money you won't need for several years... five at least.)

Don't worry about individual stocks; start with an index fund, and move to individual stocks only when -- if -- you're ready to-- and have the interest and patience to understand and closely follow business and financial developments with a handful of companies. Remember, time may be the single most important factor to your investing success. An early start means a below-average investor can earn a bigger pile of cash than an excellent investor. *Just get started*, because time is money.

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