



# Day 5: The magic of compound interest

Time to read: 2.5 minutes

Some people say compound interest is "the eighth wonder of the world". It's a powerful concept, and once you understand how to harness it, you'll agree that it's one of the most important forces in finance.

Today we're going to show you how it works.

## How compounding works

Compounding is the effect of earning interest on your interest. Let's look at a simple example.

Let's say you have HKD10,000 earning an annual interest rate of 10%. (We've chosen 10% for simplicity – but we should also point out that this would be an average over a long period of time. In reality the gains and losses in any given year can be quite dramatic.)

After one year, your capital has grown to HKD11,000. In year 2 you're now earning interest on HKD11,000 and if the rate of return stays the same, at the end of 2 years you'll have HKD12,100 and so on.

Here's what your initial HKD10,000 would be worth in 10, 20 or even 30 years (assuming an average return of 10%):

	Assuming an average return of 10%
Year	Amount
0	10,000
1	11,000
5	16,105
10	25,937
20	67,275
30	174,494

You can see from the table above that over a 30-year period, your initial HKD10,000 has grown to nearly HKD175,000, without you having to do anything.

So compounding has the effect of accelerating your money's growth over time. The longer you allow your money to compound, the greater the effect. You should read that again to let it sink in!



# 3 factors that affect compounding growth rate

Let's take a closer look at the 3 factors that drive compound returns.

### Interest rate (or "rate of return")

Each year you need to calculate the change in value of your investments (some years it might be negative) as well as any profit taken or dividends received (remember, a dividend is when the company returns either cash or shares back to shareholders from the profits they have generated). Remember that stock markets go down, too. To see how volatile stock market returns can be, take a look at <a href="the historic returns of the Hang Seng">the Hang Seng</a> <a href="mailto:lndex">lndex</a>.



#### Time

How long your investment compounds will greatly affect the final result. That's why one of the biggest risks for investors is not getting started: you'll miss out on the power of compounding returns. In fact, when you start saving is probably more important than how much you're saving.

Don't give up hope if you didn't start when you were young. Getting started at any point in time means you can start benefiting from compound interest.

#### Fees & taxes

You will need to include the cost of investing as part of your final rate of return. Sometimes those are in the form of brokerage fees (the amount you pay each time you buy and sell stock) or fund management fees (the fees paid to professional fund managers). However, index funds that are "passively managed" (meaning the fund has very low management fees) would closely mirror overall market returns and your keep costs to a minimum.

Lastly, costs can be in the form of capital gains taxes if you sell your investments and make a profit. Hong Kong doesn't have a capital gains tax, but if you invest in the US stock market, you'll be subject to something called Withholding Tax.

### What's next?

Today you learned a simple, but very powerful concept: how compounding returns can accelerate the growth of your money over time. It also highlights the cost of delaying the start of your investment journey. The longer you wait, the more you'll miss out, so the best way to benefit from the power of compounding is by getting started now. We'll help you figure out how to do that over the next 2 lessons.

Tomorrow we're going to introduce a concept called "dollar cost averaging". We'll show you how this strategy can help you consistently build wealth over time so you can avoid the emotions that come with trying to "time the market".

© Copyright. The Hongkong and Shanghai Banking Corporation Limited 2022. All rights reserved.

#### Important Information:

This document has been issued by The Hongkong and Shanghai Banking Corporation Limited and HSBC Savings Bank (Philippines), Inc. ("the Bank") in the conduct of its regulated business in the Philippines with information provided by The Hongkong and Shanghai Banking Corporation Limited, 1 Queen's Road Central, Hong Kong. It must not be distributed to the United States, Canada, or Australia or to any other jurisdiction where its distribution is unlawful. The contents of this document may not be reproduced or further distributed to any person or entity, whether in whole or in part, for any purpose. All non-authorised reproduction or use of this document will be the responsibility of the user a nd may lead to legal proceedings.

The information contained in this document is general market information. As such, it has no contractual value and should not be taken as an offer, the solicitation of an offer, a recommendation, or advise for the purchase or sale of any investment, product or service.

We do not have any obligation to issue any further publications to you or update the contents of this document. Contents are subject to changes at any time without notice. We make no guarantee, representation or warranty and accept no responsibility for the timeliness of receipt, accuracy, and/or completeness of the information contained in this document.

Investment involves a variety of risks and investors may not get back the amount originally invested. Hence, information contained in this document such as past performance, forecasts, projections, simulations, and other forward-looking statements should not be relied upon as an indication of future performance or results. If you are considering making an investment, please conduct your own due diligence.

Copyright © The Hongkong and Shanghai Banking Corporation Limited and HSBC Savings Bank (Philippines), Inc. 2021. All rights reserved

No part of this document may be reproduced, stored in a retrieval system, or transmitted, on any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of The Hongkong and Shanghai Banking Corporation Limited.