



ASX

AUSTRALIAN SECURITIES EXCHANGE

Interactive Brokers

17 April 2008

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ASX Background



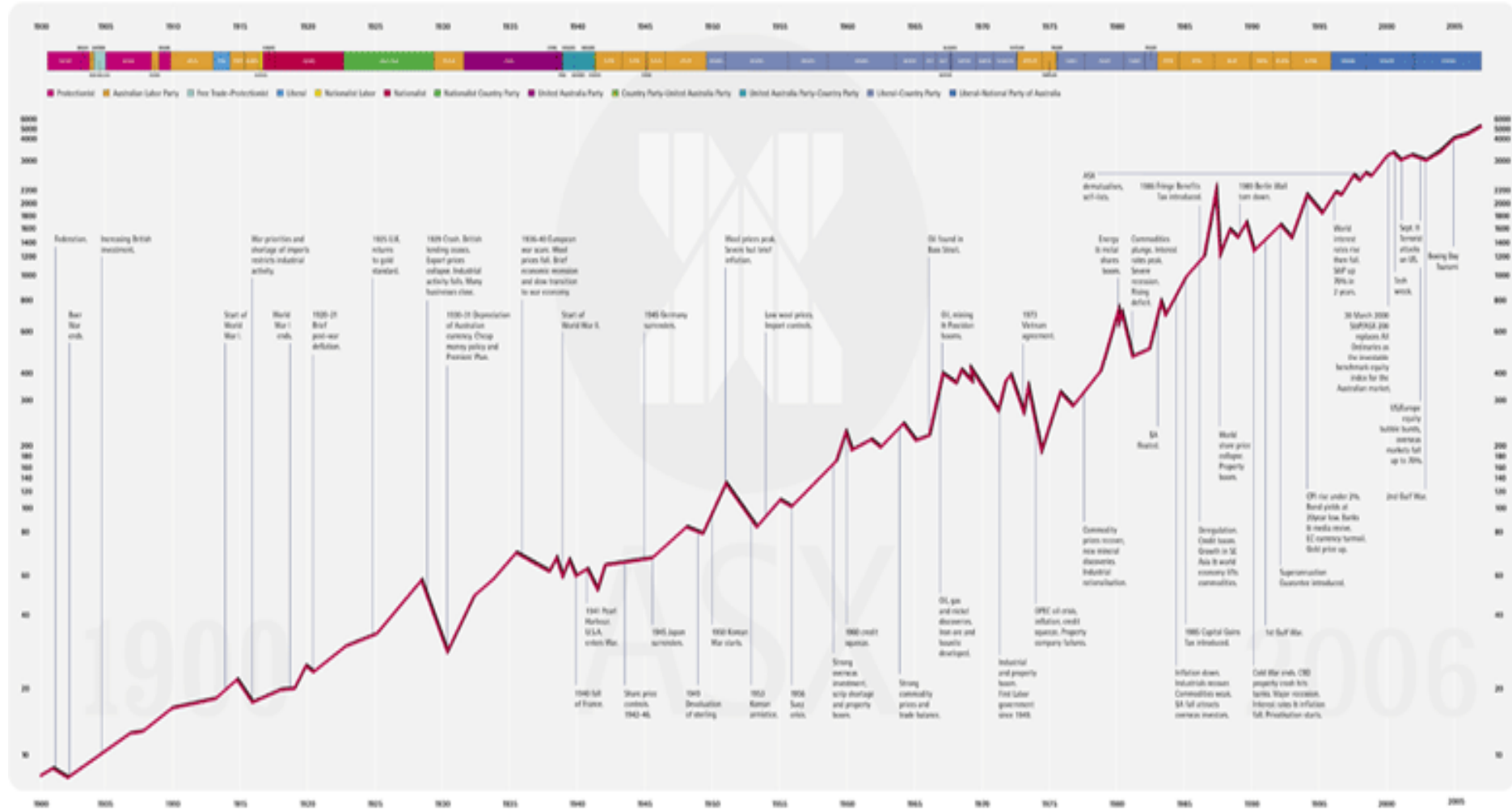
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- 2,100 Australian companies listed
- 78 Overseas companies listed
- Market Capitalisation \$1,630 billion.
- 2nd largest sharemarket in the Asia-Pacific region
- ASX was formed in 1987 by amalgamation of six independent stock exchanges all with history dating back to the 19th century
- 1st exchange was Melbourne in 1861

AUSTRALIAN SHARE PRICE MOVEMENTS

JANUARY 1900 ~ DECEMBER 2006



Standard & Poor's is the owner and operator of the S&P/ASX index series, including the All Ordinaries. The All Ordinaries, which is used for this chart, was the benchmark equity index for the Australian market up until March 2000, at which point the S&P/ASX 200 was introduced. For more information about the Standard & Poor's Australian Index series visit www.standardandpoors.com.au. The chart shows the course of share prices on Australian stock exchanges from 1900.

It is based on monthly averages from the ASX All Ordinaries Share Price Index (1900-2000), the Sydney All Ordinaries Share Price Index (2000-1970) and the Commercial and Industrial Index (1975-1990). From April 2000 this chart follows monthly averages for the All Ordinaries. A logarithmic vertical scale has been used to show the proportional importance of fluctuations over the period.

Changing Composition of ASX



December 1974

March 2008

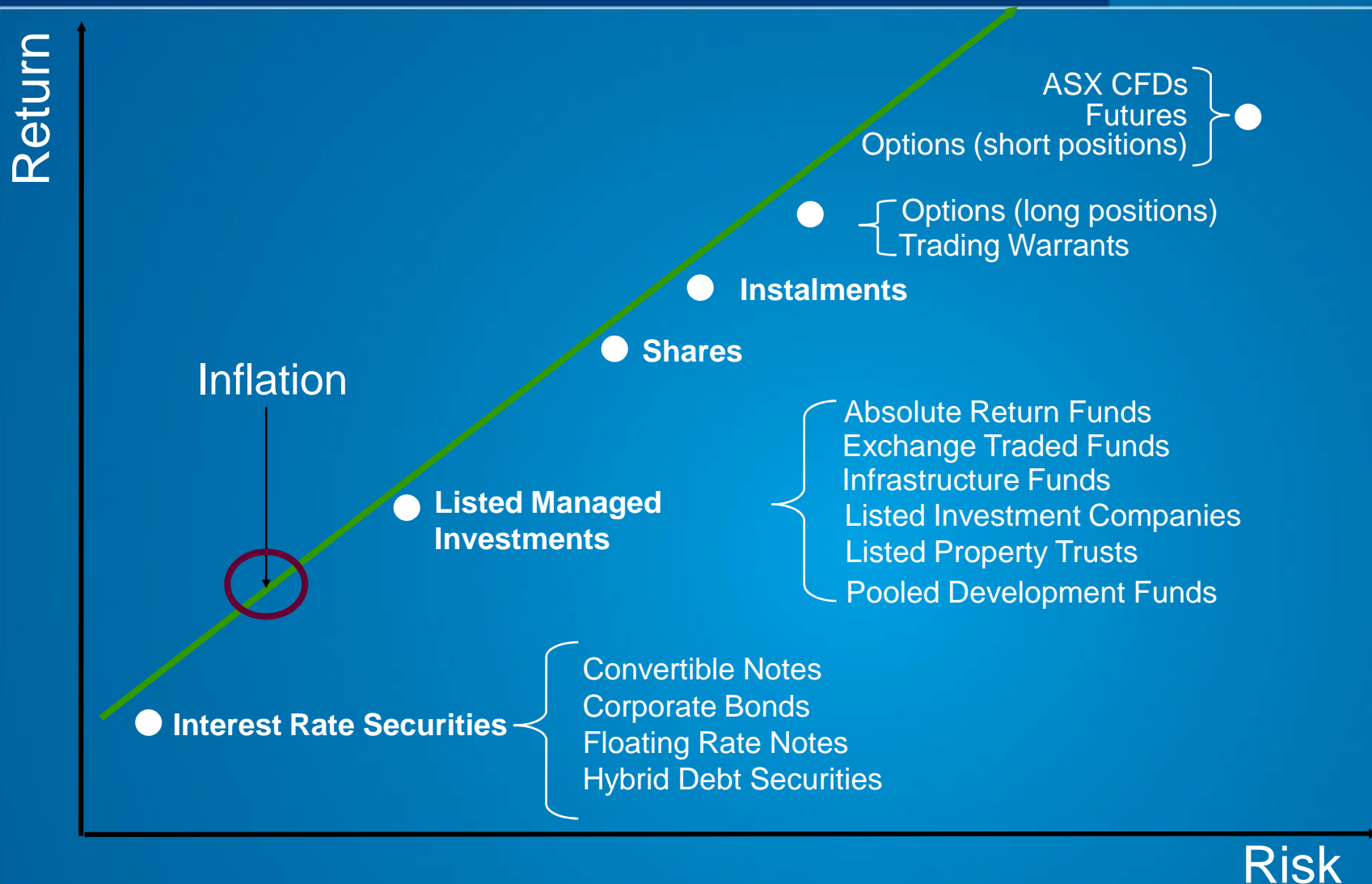
Company	Mkt cap \$m	Company	Mkt cap \$bn
BHP	1012	BHP Billiton	113.0
CRA	591	CBA	51.7
MIM	412	NAB	47.6
Hamersley	359	Westpac	45.1
CSR	347	ANZ	44.1
WMC	287	Woolworths	34.0
Bougainville	242	RIO	32.9
Bank NSW	239	Westfield	31.2
Myer Emp.	182	Telstra	26.0
Comalco	176	Wesfarmers	25.8

The ASX Product Suite



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Listed Managed Investments

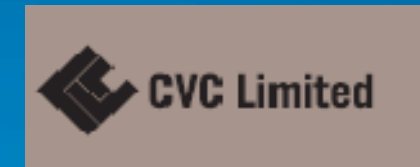


- LMIs consists of:
 - Listed Investment Companies (LICs)
 - Listed Property Trusts (LPTs)
 - Infrastructure Funds
 - Exchange Traded Funds (ETFs)
 - Absolute Return Funds (ARFs)
 - Pooled Developed Funds (PDFs)



The LMI sector accounts for close to **15%** of the **1.5 trillion** capitalised value listed on ASX.

Listed Investment Companies (LICs)



MILTON CORPORATION LIMITED
An Australian Listed Investment Company
Listed since 1958



LICs



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- Not a new concept e.g. Argo Investments listed back in 1947!
- Can be managed either both internally or externally
- Currently more than 60 LICs listed on ASX
- Provide choice through;
 - Australian & international shares
 - Private equity
 - Specialist sectors such as wine and resources
- LICs may have up to 200 stocks in their portfolios
- Low cost – MER of traditional LICs between 0.15%-1.00% pa
- Dividends yields are generally between 3-5% (fully franked)
- CGT credits maybe passed through to investors
- Are closed-end vehicles
- May trade at a discount or premium to NTA (Net Tangible Asset)
- Are relatively liquid – annualised liquidity to Jan 31, 2008 was 35.91%

NTAs



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Premium or discount to Net Tangible Assets

➤ Net Tangible Assets

- The net value of the underlying investments on a per share basis
 - premium, share price more than the value
 - discount, share price less than the value

ASX publishes a monthly NTA report accessible via www.asx.com.au/lmi

Benefits of LICs



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- Simple to use and understand
- Concentrated exposure to specific investment sectors
- Diversification across styles and investment philosophies
 - capital growth vs. income or both
- Low cost investment method
- Taxation advantages – LIC dividends are commonly fully franked
- Tend to be stable investments in volatile markets
- Benefits of being listed on ASX

Risks of LICs



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- Market Risk – value of LICs can rise or fall
- On market prices may reflect a discount or premium to the LICs NTA
- Distribution Risk – future distributions are not guaranteed
- Security Risk – LICs may perform differently due to the operations of their underlying assets or their structure
- Diversification Risk – a lack of diversification within a LIC can tie an investor's performance to a narrow section of the market
- Liquidity Risk
 - Ability for the LIC to buy and sell assets
 - Ability for the investor to buy or sell the LIC



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- Listed Managed Investments – Exchange Traded Funds (ETFs)

What is an ETF?



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- ETFs invest in a **basket of shares** that make up an index or sector
- **Open-ended structure** - similar to unlisted managed funds
- ETFs provide investors with a **diversified portfolio** in one simple transaction

ETFs – a global phenomenon



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- First product launched on the Toronto Stock Exchange in 1989
- The ETF universe: US, Europe, Japan and Asia-Pac (ex-Japan)
- Over 300 exchange traded products available globally = \$320b in assets
- Trading in the US is almost half of all daily turnover
- Global Managers include State Street, Vanguard, Barclays, Bank of New York

ETFs in Australia



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- First launched in Australia in August 2001
- Currently 7 ETFs listed on ASX
 - 3 **domestic index** funds (SPDR)
 - 14 **international index** funds (ishares)
 - 1 commodity (Gold)
- Market capitalisation of \$1.6b (Feb 08) excl BGI
- Predominately used by local and offshore institutions

ETFs - just imagine ...



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- Diversification in one transaction
- Low cost (MERs between 0.286% - 0.40%)
- Easy to buy and sell
- Pricing at NAV
- Low risk
- Simple administration
- Suitable for SMSF and IMAs
- Units held in CHESS or Wrap Account



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➤ Domestic ETFs - SPDRs

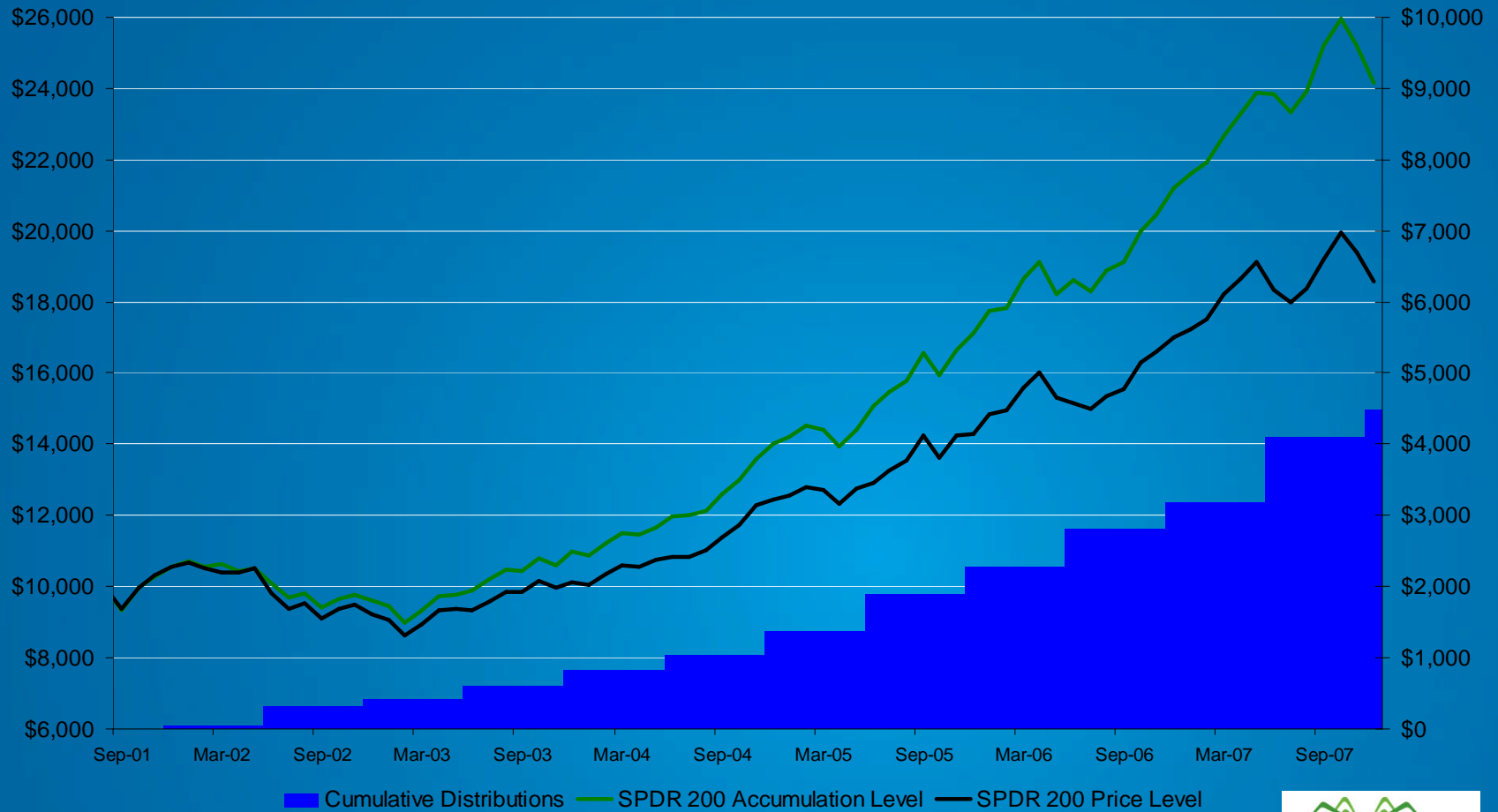
How do SPDRs compare with shares and managed funds?



	SPDRs	Ordinary Shares	Unlisted Managed Funds
Diversified portfolio of shares from one transaction	YES	NO	YES
Cost-efficient	YES	YES	NO
Instant transparency of performance	YES	YES	NO
Tradability	YES	YES	NO
Income vehicle	YES	VARIABLES	YES
Dividend re-investment	YES	YES	VARIABLES
Flexible transaction management	YES	YES	NO
Exchange traded	YES	YES	NO



Growth of \$10,000 Since Inception - SPDR 200



Source: Factset





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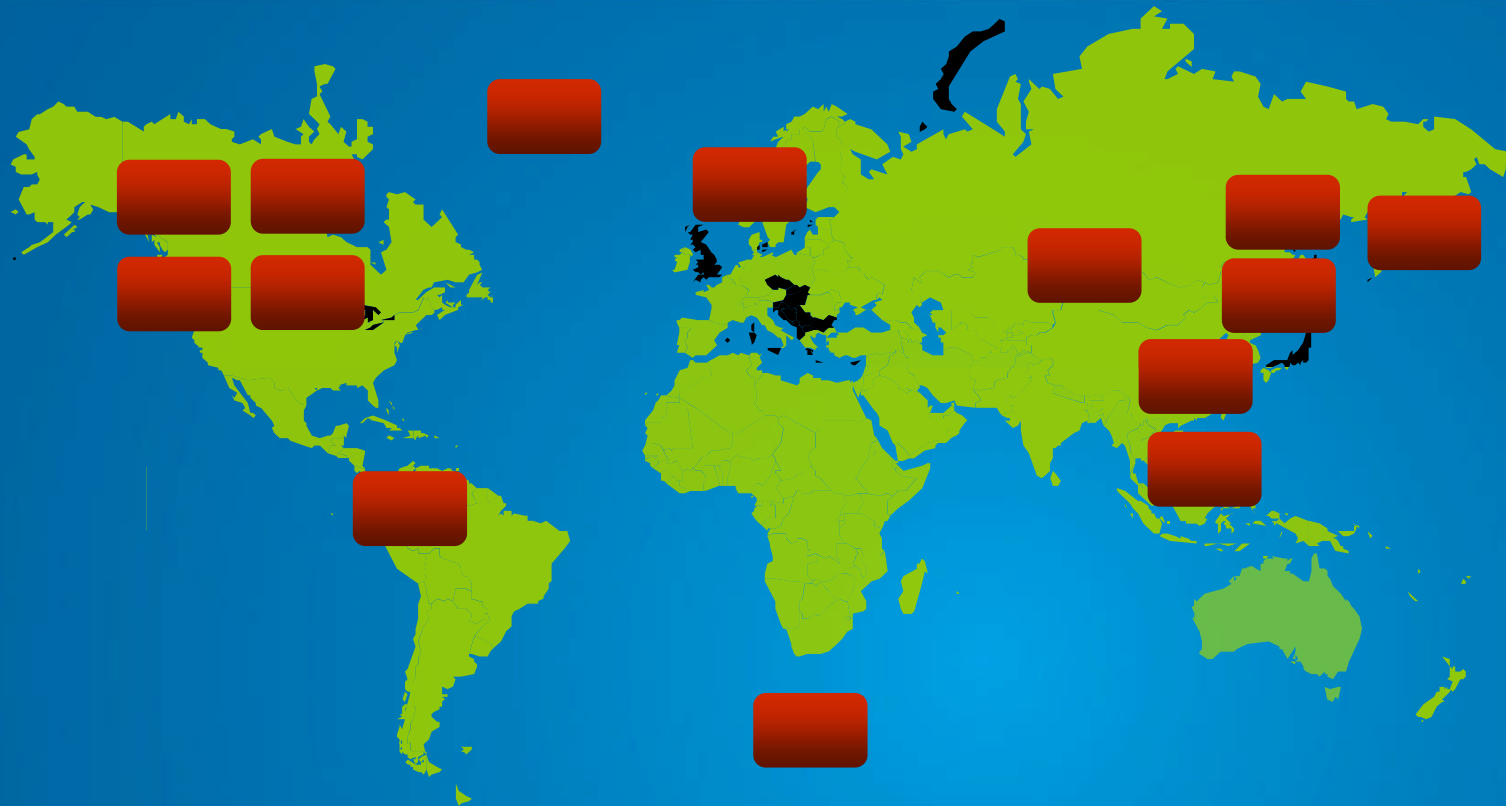
➤ International ETFs - iShares

Gain access to global markets



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Agenda

- Structured Products - Instalments



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What is an Instalment?

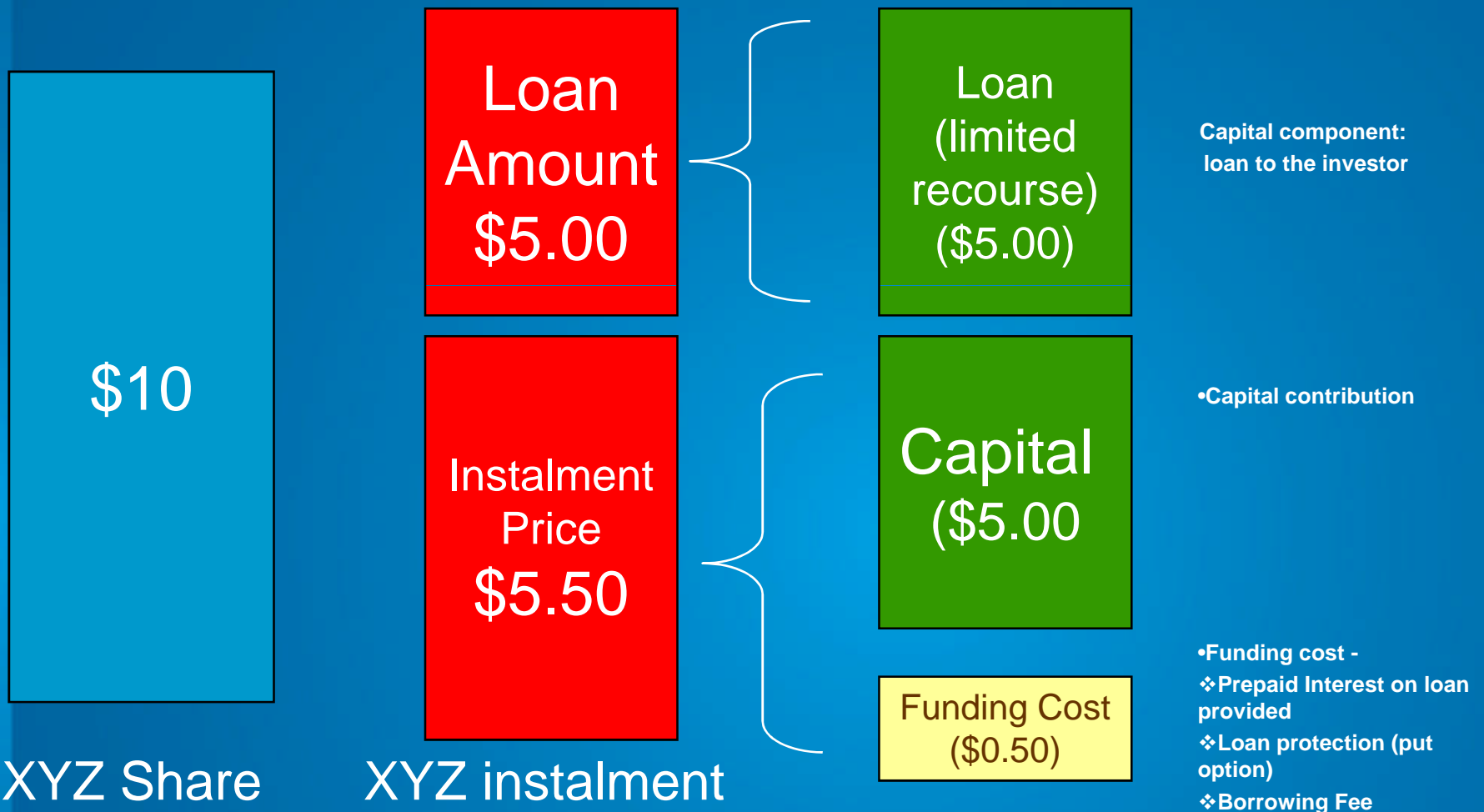
- Instalments allow full exposure to a share with **part payment now** and an **optional final payment later**
- Entitlement to all dividends, distributions and franking credits similar to share ownership
- Similar to Telstra instalment receipts
- Generally issued between 1 to 15 years by a financial institution
- Tradable on-market (ASX) through your broker
- Eligible form of gearing for Self Managed Super Funds (SMSF)

Pricing an Instalment



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Scenarios - share price movements



- What MAY happen when purchasing an instalment.
- XYZ is \$10
- XYZIMM
- Instalment value \$5.50
 - (inc \$0.50 funding cost)
- Loan amount \$5.00



XYZ Share



XYZIMM

Scenarios - share price rise



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- At maturity the share price is \$20
- Instalment now valued at \$15
- Loan amount remains \$5.00
- The instalment's loan amount is fixed, therefore the value of the instalment will increase by the same amount (minus the decay of the funding cost) in absolute terms.

\$20.00

XYZ Share

Loan
Amount
\$5.00

Instalment
Price
\$15.00

XYZIMM



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Scenarios - share price flat

- At Maturity the share price is unchanged
- Instalment value remains \$5.00
- Loan amount remains \$5.00
- No Margin Call
- Funding decay occurs
 - Prepaid interest
 - Borrowing fees
- The funding decay may be claimed as an interest deduction.

\$10.00

Loan
Amount
\$5.00

Instalment
Price
\$5.00

XYZ Share

XYZIMM

Scenarios - share price falls



- **If the share price is \$2 at maturity**

- Instalment valued at \$0.00
- Loan amount remains \$5.00

No recourse	\$3.00	Loan Amount \$5.00
XYZ Share	\$2.00	

- No Margin Call
- The loan amount is a limited recourse loan.
- No obligation to repay the loan amount, irrespective of the share price performance (up, down, or sideways).
- You walk away with a capital loss and claim the funding cost as a tax deduction.

- Please note that in each scenario the example has been assumed to be at expiry. At any time you are able to sell the instalment on market, crystallising a profit or loss.

Types of Quoted Instalments



- **Self Funding Instalments (SFI)**

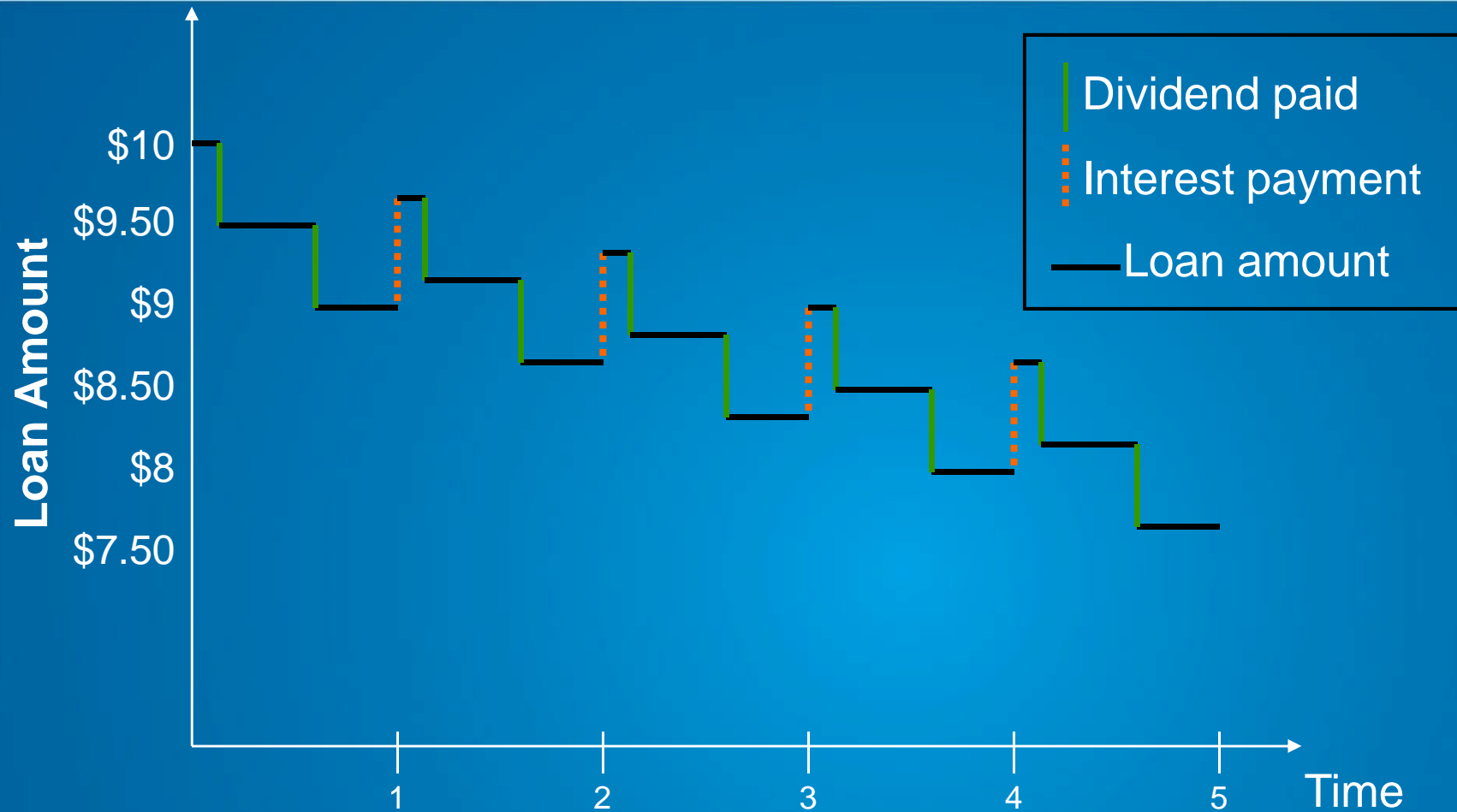
- Tend to be moderately geared with an investment term between 5 and 10 years.
- Post the initial payment, generally, there are no additional payments required during the investment term.
- SFI holders enjoy a vested right to all entitlements however the cash component of a dividend is used to reduce the loan amount rather than being paid in cash.
- The loan amount increases once every 12 months as funding costs are added to the total loan amount.
- Over the life of the SFI, the loan amount can periodically decrease due to the payment of dividends and increase by the amount of funding costs.

How SFIs Work?



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Leverage & Diversification



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Leverage

➤ Instalments can leverage your investment – initial investment of \$40,000 = \$ 76,367 of share exposure

Stock	Shares		Instalment	
	Price	Quantity	Price	Quantity
BHP	\$39.75	251	\$19.59	510
CBA	\$51.80	193	\$26.59	376
QBE	\$29.35	340	\$16.34	611
WOW	\$29.15	343	\$15.59	641
Total Invested		\$39,932		\$39,938



\$76,367

Diversification



- Instalments can help diversify your investment – gain share exposure at a fraction of the price by investing the equivalent number of instalments as shares purchased.

Stock	Shares		Instalment	
	Price	Quantity	Price	Quantity
BHP	\$39.75	251	\$19.59	251
CBA	\$51.80	233	\$33.16	233
QBE	\$29.35	340	\$16.34	340
WOW	\$29.15	343	\$15.59	343
Total Invested		\$39,927		\$23,546

- Remaining funds \$16,380 can be used to invest in other assets (instalments, other shares, property etc).



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➤ Exchange Traded Options

Options as “insurance” for shares



- Insurance is commonly used for protection of assets such as cars, home and contents, income and personal health
- Similarly, we can take positions in derivative markets that hedge our exposure in markets for underlying assets

When looking at Australian equities:

- Underlying market – **ASX**
- Underlying asset – “Blue chip” shares
- Derivative market – **Exchange Traded Options Market**
- Hedging instrument – most commonly a **Put Option**

Put Options



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- An option to **sell** the underlying
- **Example: BUY AMP April \$9.00 PUT @ 15 cents.**

Gives the taker the right to sell AMP for \$9.00 any time up until, and including, the expiry date in April.

For this right, the taker pays a premium (15 cents) to the writer. The writer must buy 1000 AMP at \$9.00 if called upon (exercised) to do so by the taker.

Why use put options for protection?



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Advantages

- Lock in a sale price for your shares (sleep at night!)
- Retain unlimited profit potential
- Retain the benefits of stock ownership (dividends, voting rights etc)
- Allows time to decide on a course of action
- Can help to keep emotions in check

Disadvantages

- Protection comes at a cost

Comparing options for cover



The following are hypothetical put option values for stock XYZ, which is currently trading at \$30.00:

Put Strike/ Month	April '07	July '07	Dec '07
\$30.00	\$1.01	\$1.84	\$2.74
\$29.00	\$0.59	\$1.41	\$2.27
\$28.00	\$0.31	\$1.00	\$1.85
\$27.00	\$0.14	\$0.71	\$1.45
\$26.00	\$0.05	\$0.45	\$1.11

Just like any insurance premium, the cost of protection directly corresponds with the length and level of cover required.

The gap between the current stock price, and any option of a lower strike price taken for protection, can be considered as the “excess” to be borne by the investor should a fall occur.

Determining the **cost** of protection?



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Any factor that increases the possibility of loss for the seller of the option will make the option more expensive - as sellers need compensation commensurate with the risk they take on.

- **The higher the agreed selling price (strike price), the more expensive the put option**
- **The longer the time to expiry, the more expensive the option**
- **The greater the volatility of the underlying stock, the more expensive the option**
- Other influences on an options value include interest rates, dividends and market expectations

Applying **strategies** for stock protection



Two of many possible strategies for insuring a long stock position:

- **Protective put**
- **Collar**

The market outlook in each example is cautiously bullish.

The main objective is to fully protect the capital value of the underlying shares.

Note - A different market outlook could call for a different strategy!

Protecting a **portfolio**



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In the case that an investor wants to hedge an entire portfolio, there are two main alternatives to consider:

- Insure some or all of the stocks in the portfolio on an individual basis using individual equity options strategies;
- **OR:** Use index options to create a hedge, offsetting a fall in the value of the portfolio with a gain in value of a bought index put option

Here we will focus on the use of index puts as a hedge for a portfolio

Index put options



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In short:

Index put options give the buyer speculative exposure to a fall in the level of the **S&P/ASX 200 index** (Stock code **XJO**)

Prices are quoted in **points**, with the value of each point being **\$10**

On the expiry day, positions are **cash settled** for the difference between the opening level of the index that day and the strike price of the bought option (if in the money), paid out at the rate of \$10 per point

Index options are **European** exercise style, meaning the option can only be exercised on the expiry day.

Index put **strategy** as protection



Advantages:

- Provides a degree of protection against a fall in portfolio value until the expiry date
- Suitable for protecting a broad-based share portfolio
- Can be cheaper than buying options over individual stocks
- Simpler and less labour intensive than buying options over individual stocks

Disadvantages:

- Tracking error (the imperfect correlation between movements in your portfolio and the index) can be beneficial or damaging.
- Not as accurate a hedge as buying options over individual stocks

Conclusion



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- **Given the range and flexibility of options, the trader has a number of alternative strategies at their disposal to protect their underlying shares**
- **The choice of which strategy to use will depend on the trader's view of the market, time horizon, and attitude towards risk**
- **As with any form of insurance, there will always be a trade-off between degree of fit and cost, and it is up to the trader to weigh up the benefits of a certain level of protection against the premium payable to obtain that insurance**

Other Option Strategies



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- **Covered Call – Earn extra income**

Buy or Sell Rights / Obligations



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	CALL	PUT
B U Y E R	The right to buy	The right to sell
S E L L E R	The obligation to sell	The obligation to buy

Covered Writing



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Sale of a call against

- ✘ Existing stock
- ✘ Newly acquired stock
(Buy-write)
- ✘ Neutral to slightly bullish on stock
- ✘ Willing to sell at predetermined level

Covered-Write Example



Own/Buy 1000 XYZ	\$2.80
Sell (1) April \$3.00 call	<u>(0.06)</u>
Cost = Breakeven	\$2.74

IF STOCK ABOVE \$3.00 AT EXPIRATION

Sale Price	\$3.00
<u>Cost</u>	<u>\$2.74</u>
<u>Gain</u>	<u>\$0.26 = 9.5 %</u>

For 21 days

IF STOCK BELOW BREAKEVEN (\$2.74) LOSSES WILL OCCUR

Without dividends or commissions

Adjusting A Position: Rolling A Covered Call



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1. Review company fundamentals before rolling
2. The closer to expiration the roll is done, the lower the time premium on the short call purchase
3. The closer to intrinsic value the short call trades, the higher the risk of early assignment

Adjusting A Position: Rolling A Covered Call



Bought: XYZ

Sold: April \$3.00 call

XYZ now \$3.10 (4 days until expiration)

Buy April. \$3.00 call (\$0.15) to close

Sell June. \$3.25 call \$0.30 to open

Net Cr./Dr. \$0.15 credit