Cash issues & Apple case

Triinu Tapver

12.10.2018

Today – Cash issues and valuation

1. What the company can do with excess cash?
   1.1. Dividends
   1.2. Share re-purchase
2. How does excess cash affect financial ratios?
3. Valuation with multiples
4. Apple case

1. What the company can do with excess cash?

1. Finance its own investment projects
   - <u>Pros</u> – risk for creditors decreases, easy for managers (no need to get financing elsewhere)
   - <u>Cons</u> – if return on investments is lower than the required rate of return, company value is destroyed
2. Pay dividends
3. Buy back (repurchase) shares
4. Reduce its capital (share cancellation)


DIVIDENDS
BUYBACKS
VS
DIVIDEND
WHICH IS A BETTER CHOICE?

1.1. Dividends

- Dividends are irrelevant on perfect markets – shareholders are indifferent between dividend and increase in market value of the stock.
- Signalling argument – dividends as a signal of future earnings of the company
  - dividend announcement – good news
  - no dividend – bad news
- Some shareholders prefer dividend over increase in value of the stock (clientele effect, bird-in-the-hand theory).
- Agency explanation – dividend mitigates conflicts between owners and managers, i.e. managers cannot expropriate excess resources for their own benefit.

1.2. Share re-purchase

Buy back (re-purchase) shares – usually not substitute, but complement to dividends. Compared to dividends provide:

- More flexibility – re-purchase is not as strong commitment as dividend, suitable if temporary increase in cash flows occurs.
- Means for executive compensation – if stocks or stock options are part of the compensation (is for Apple).
- Enables to offset dilution of stock occurring due to exercise of stock options.
- Correct for the undervaluation of the share.
- Tax benefits.

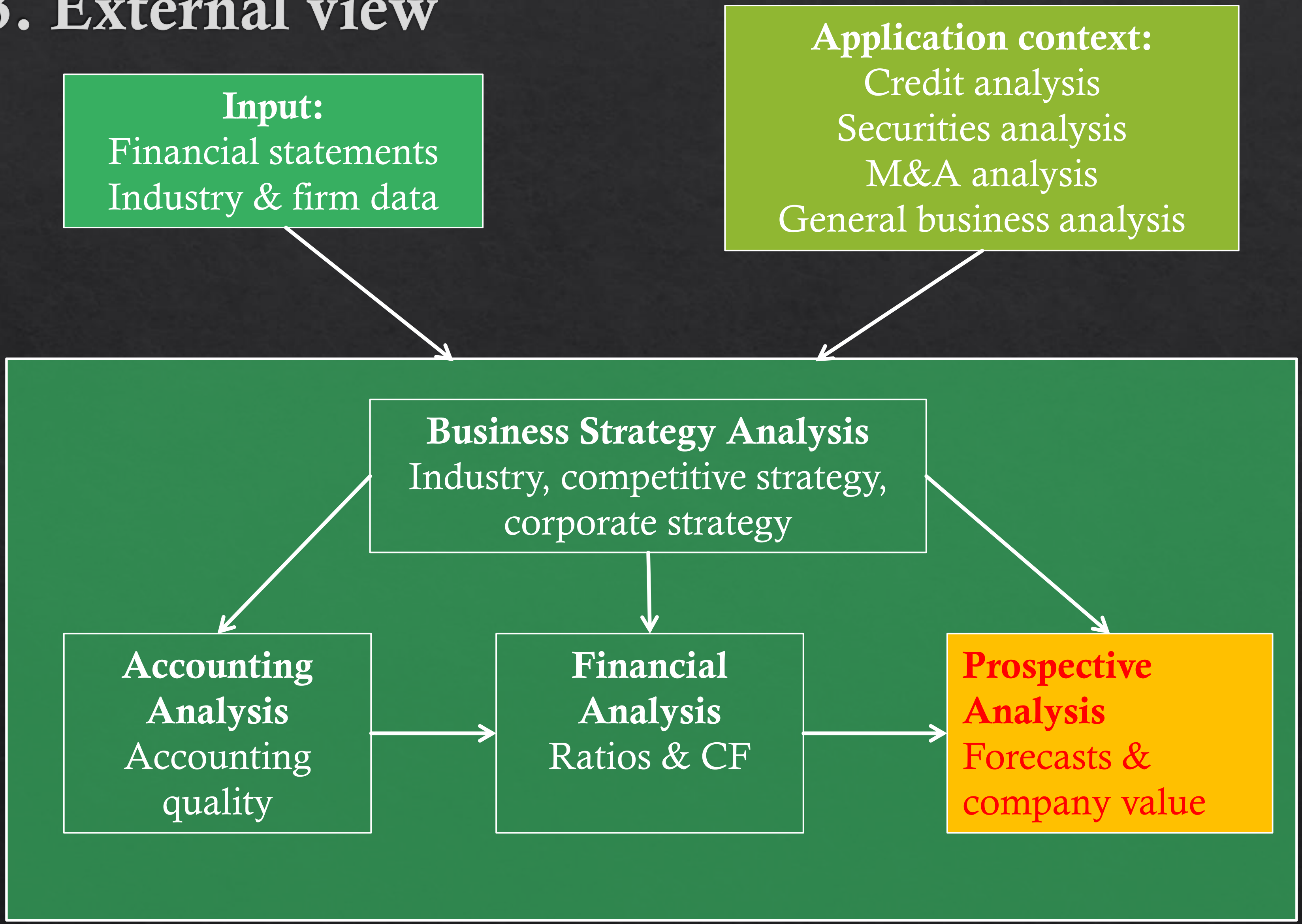
2. How does excess cash affect financial ratios?

- Affects the size of assets and there through indicators – ROA, total asset turnover ⬇
- Affect indicators including current assets – current ratio, quick ratio, cash ratio ⬆
- Affects solvency ratios – debt to assets, financial leverage ratio (total assets/equity) ⬇
- In DCF valuation cash is added to the discounted FCFF or when subtracting debt, net debt is used instead.

  ➡ Shareholder value is higher

  NB! Pay attention to tax effects.

3. External view



3. Valuation with multiples (1)

- **Price multiples** – stock's market price to some fundamental value per share
  - **P/E** = market price of share (P) / EPS
    Problem – does not make sense if EPS<=0 or close to 0.
  - **P/B** = market price of share (P) / book value per share (B) (=common shareholders' equity /number of common shares outstanding)
  - **P/S** = market price of share (P) / sales per share (S)
  - **P/CF** = market price of share (P) / cash flow from operations per share (CF)
  - **Dividend yield (D/P)** = dividend per share (D) / market price of share (P)

NB! For further discussion of benefits and drawbacks of each indicator see additional reading materials.

3. Valuation with multiples (2)

- **Enterprise value multiples** – market value of the company to some fundamental value
  - **EV/EBITDA** – market value of debt, common equity and preferred equity to EBITDA
  - **EV/FCFF** – market value of debt, common equity and preferred equity to free cash flow to firm
  - **EV/EBITA** – market value of debt, common equity and preferred equity to EBITA
  - **EV/EBIT** – market value of debt, common equity and preferred equity to EBIT
  - **EV/S** – market value of debt, common equity and preferred equity to sales

3. Valuation with multiples (3)

Valuation methods with multiples:

- **Comparables** – company is valued based on multiples of comparable companies.

Example 1: Find the value of company X share with EPS 1.50 EUR. Comparable company Y has P/E 22.

Value of X share = 1.5*22 = 33 EUR.

Example 2: Find the value of company X with EBITDA 58 th EUR. Comparable company Y has EV/EBITDA 5.1.

Enterprise value (EV) of X = 58*5.1 = 295.8 th EUR.

- **Forecasted fundamentals** – multiples are derived from forecasted fundamentals.

Example 3: Derive the stock value of company X from FCFE = 61.22 EUR. Forecasted EPS is 5.80. Justified forward P/E = 61.22/ 5.80 = 10.6. The latter can be compared with current P/E.

Apple case introduction (1)

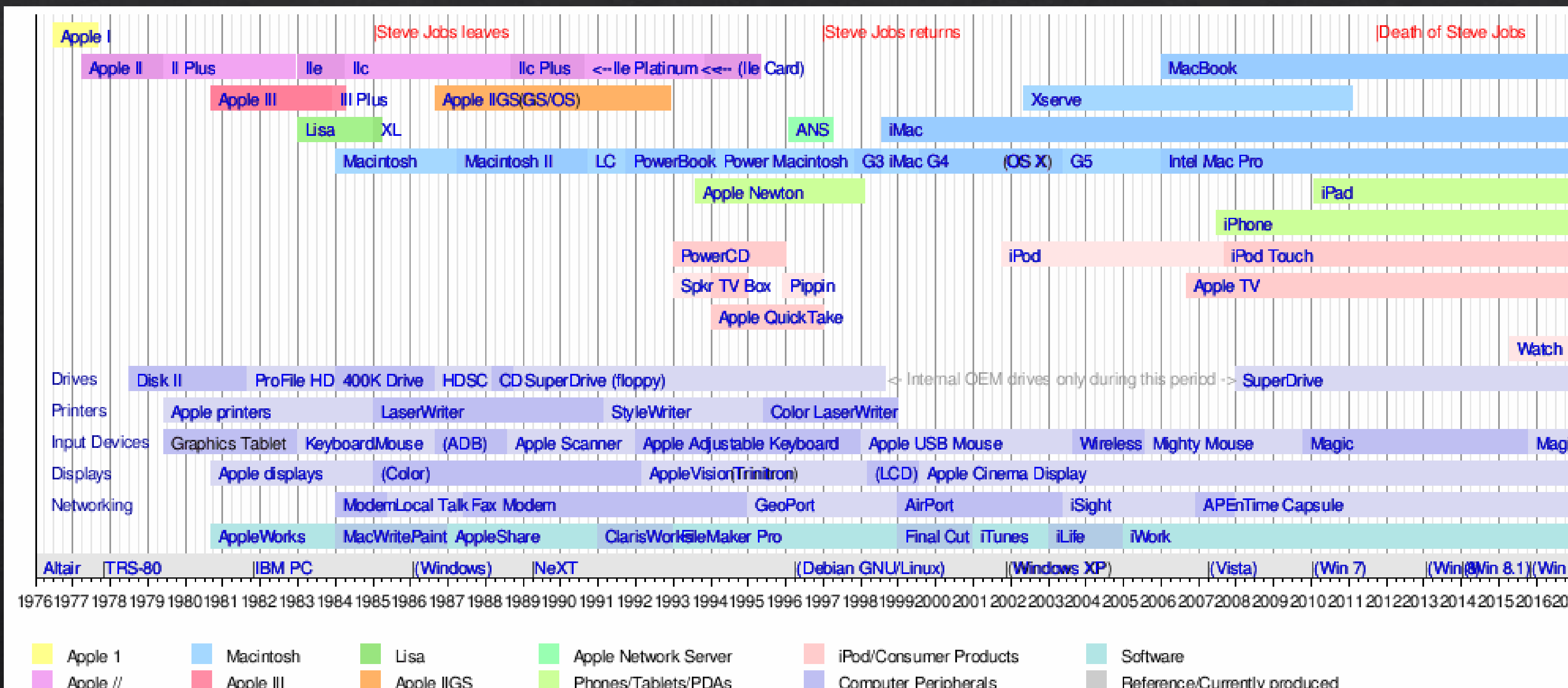
- Company – Apple
- Founded in 1976 by Steve Jobs and Steve Wozniak.

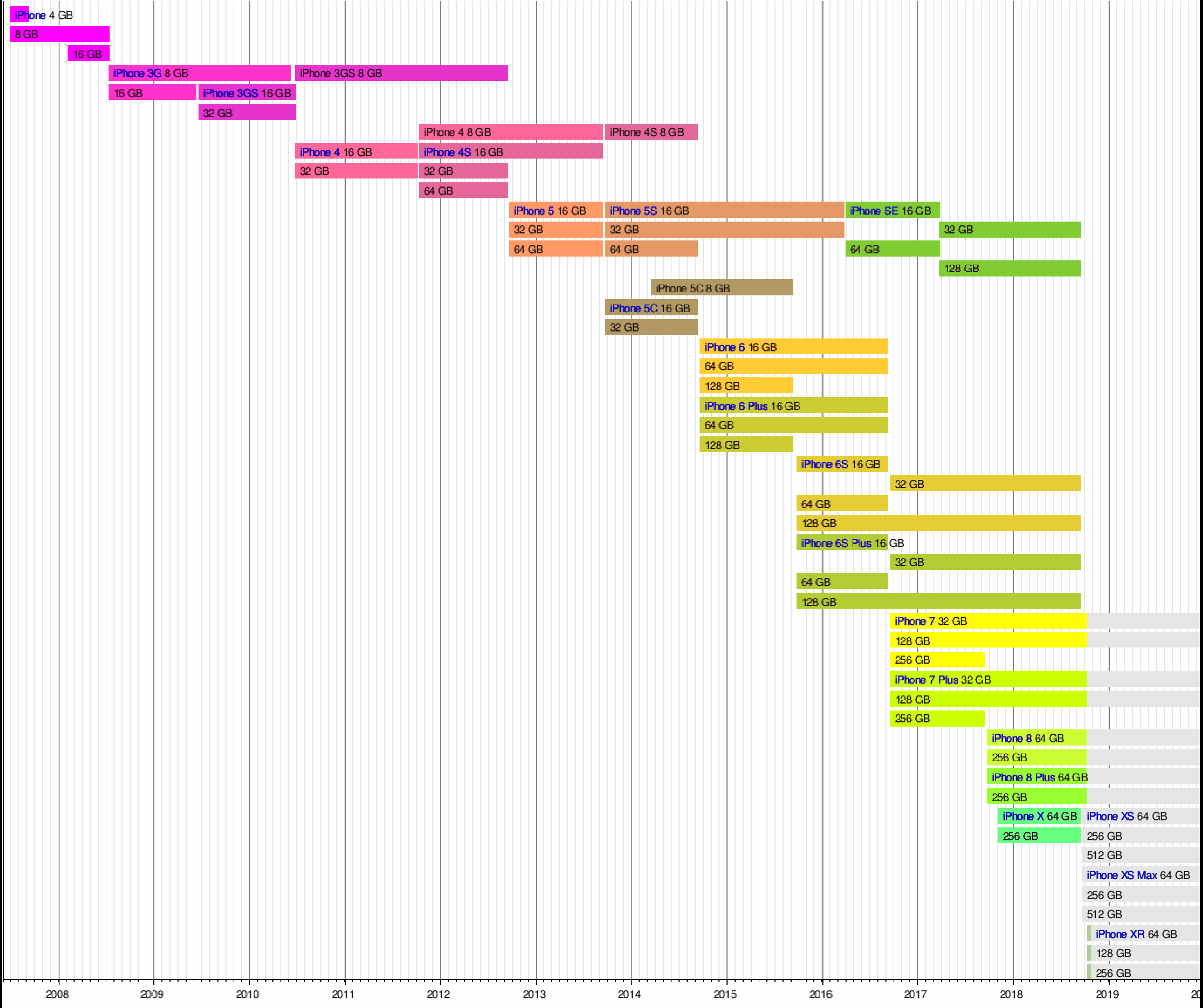
www.huffingtonpost.com

Apple case introduction (2)

- Historical milestones
  - 1977 Apple II first commercially successful mass-produced microcomputer.
  - 1984 Mac computer
  - 1985 Jobs left Apple after internal power struggle with John Sculley and established NeXT.
  - 1997 Apple bought NeXT, Steve Jobs back.
  - 2001 Apple Stores – sales outlets for Apple products (today 504).
  - 2001 iPod.
  - 2003 iTunes Music Store – buy songs with a single click.
  - 2007 iPhone smartphone.
  - 2009 Jobs disclosed his illness (pancreatic cancer)
  - 2010 iPad.
  - 2011 Jobs died, Timothy Cook took over as CEO.

Apple case introduction (3)
Timeline of Apple products

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iPhone XS Max 64 GB
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2018
2019

Follow-up

Analysts thoughts of what happened in 2013 - drop in gross margin not liked by investors:

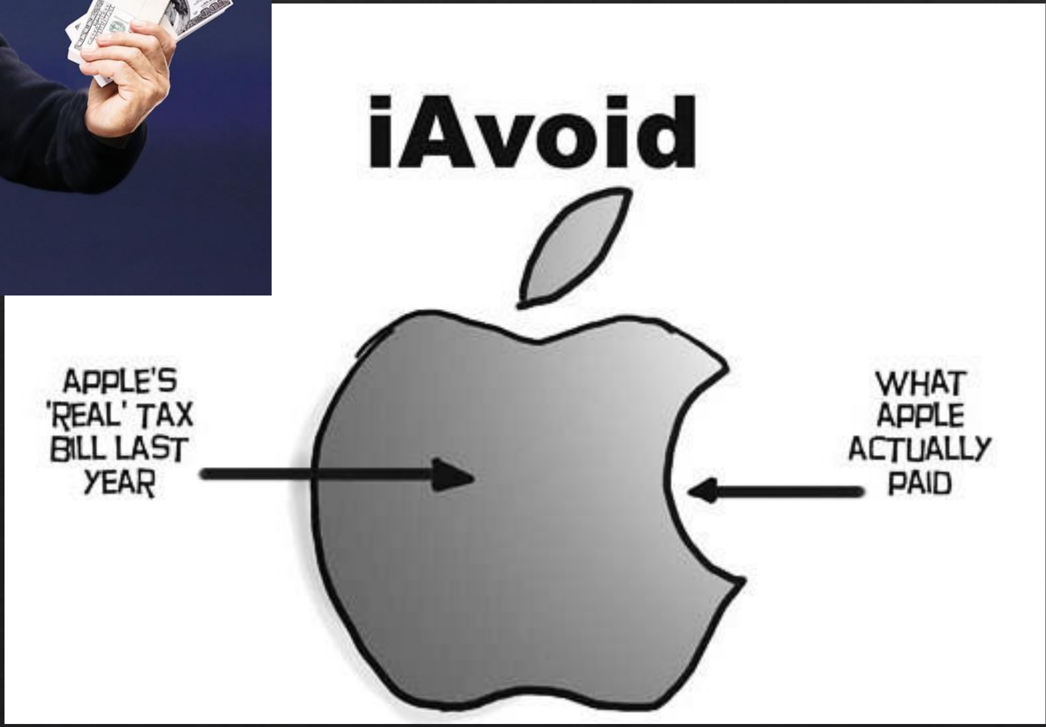
- Gross margin extraordinarily high in 2011-12 as iPhone4S featured only minor re-engineering from the iPhone4.
- Re-tooled (and lower-margin) iPhone5 from 2012, existing market exhausted and discount sales to China, smartphone market got commoditised, new product iPad had lower margin; not known whether new CEO was a product visionary nor whether there were any truly great new products in the pipeline.

Follow-up

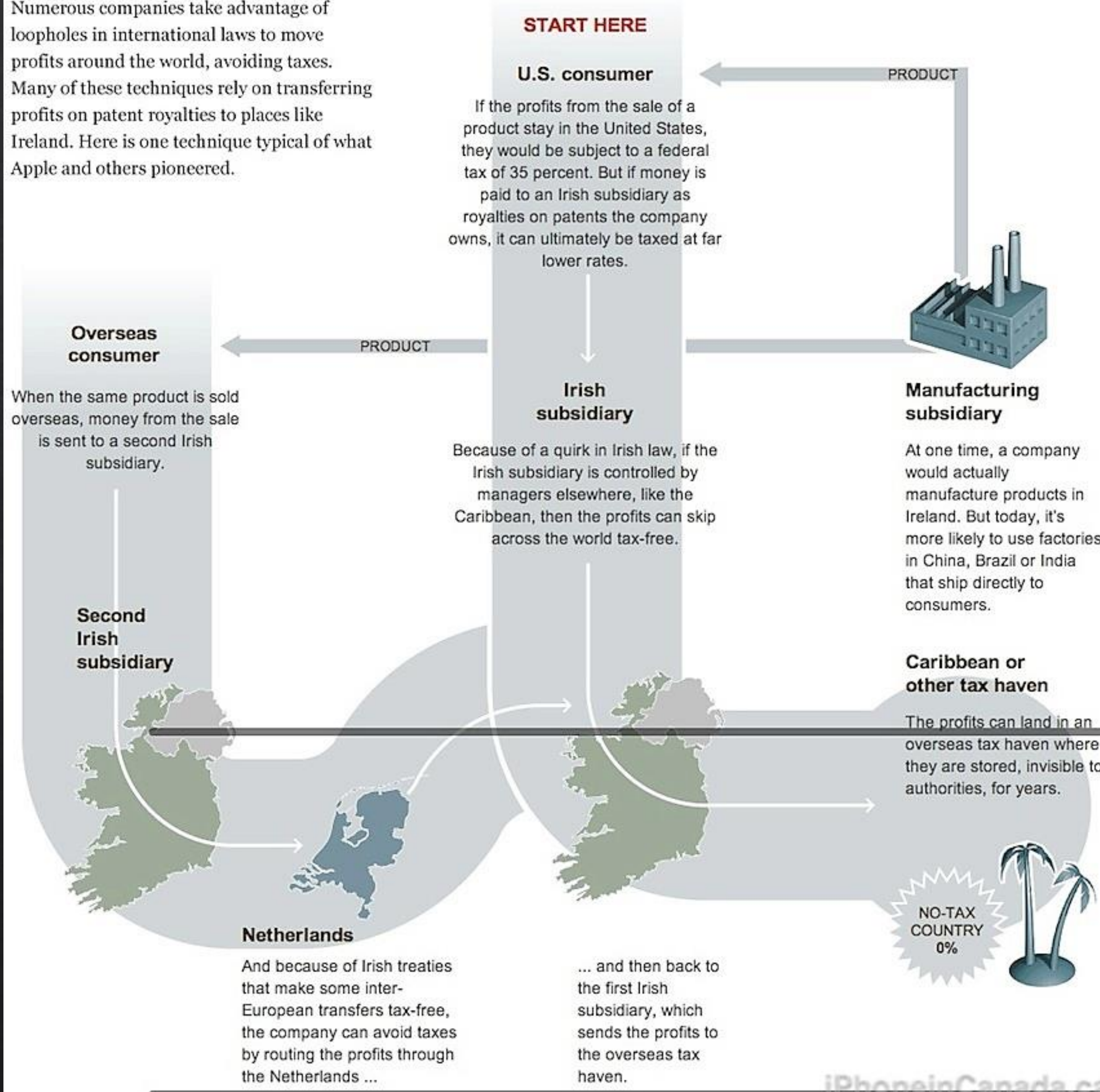
Analysts thoughts of what happened in 2015 - drop of gross margin not liked by investors

- Concerns that Apple may be losing ground in China (25% of revenues); Apple, former smartphone segment leader, is now trailing Chinese tech co-s Xiaomi and Huawei.
- Can Apple find new geographies to drive growth? Maybe not. Will they be able to lift the average selling price? Probably not. Are they dependent on the iPhone? Yes.
- Investors would feel better if Apple had another product to fill the space, Apple Watch and Apple Music, however, are not likely to do that in the near term.

Apple case discussion



Double Irish With a Dutch Sandwich



Thank you!