

The economic implications of an
increase in the fiscal burden
of DSW's potash business:
an economic opinion



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Credentials

- Senior Managing Director and Head of Compass Lexecon in Europe.
- M. Phil and D. Phil degrees in Economics from the University of Oxford.
- Research Fellow at the Centro de Estudios Monetarios y Financieros (CEMFI, Madrid).
- Professor of competition economics at the Barcelona Graduate School of Economics (BGSE).
- NGA for the European Commission and the UK Office of Fair Trading at the International Competition Network (ICN).
- Economist of the year in 2012 by the Global Competition Review

Credentials

- Published on competition, industrial organization and finance in the Antitrust Bulletin, the Antitrust Law Journal, the Economic Journal, the European Competition Journal, the European Competition Law Review, the European Economic Review, the Fordham International Law Journal, Industrial and Corporate Change, the International Journal of Industrial Organization, the Journal of Competition Law and Economics, the Journal of Economics and Management Strategy, the Journal of Economic Theory, the RAND Journal of Economics, the Review of Financial Studies, the University of Chicago Law Review, and World Competition.
- I am also co-author of *The Law and Economics of Article 102 TFEU*, Hart Publishing, 2013 and editor of *Harnessing Renewable Energy in Electric Power Systems: Theory, Evidence and Policy*, RFF Press, 2010.

Credentials

- Advised on numerous competition cases and given expert testimony before competition authorities and courts of several EU member states, as well as in cases before the European Commission and the European General Court.
- Submitted expert evidence in Israel and in Argentina, Australia, Brazil, Canada, Chile, Colombia, India, Jamaica, South Africa, Turkey, and the United States.

My analysis

- I have investigated whether a tax on DSW's profits will reduce DSW's investment in productive capacity and marketing.
- I have also analysed whether such a tax will allow DSW to compete effectively in the global potash market.

Summary of conclusions

- I find that a tax on DSW's profits will reduce DSW's investment in productive capacity and will gradually and cumulatively erode DSW's competitiveness in the global potash market.



I. Impact on cash flows

- A tax on profits would reduce DSW's cash flows.
 - DSW's prices for potash are driven by global market conditions, namely crop prices and the global market price of potash.
 - DSW's large customers exert a significant downward pressure on prices.
 - I find that DSW's potash prices are highly correlated with worldwide prices.



DSW is unable to profitably increase its potash prices unilaterally and, therefore, will be unable to maintain its cash flows after a tax increase by raising prices.

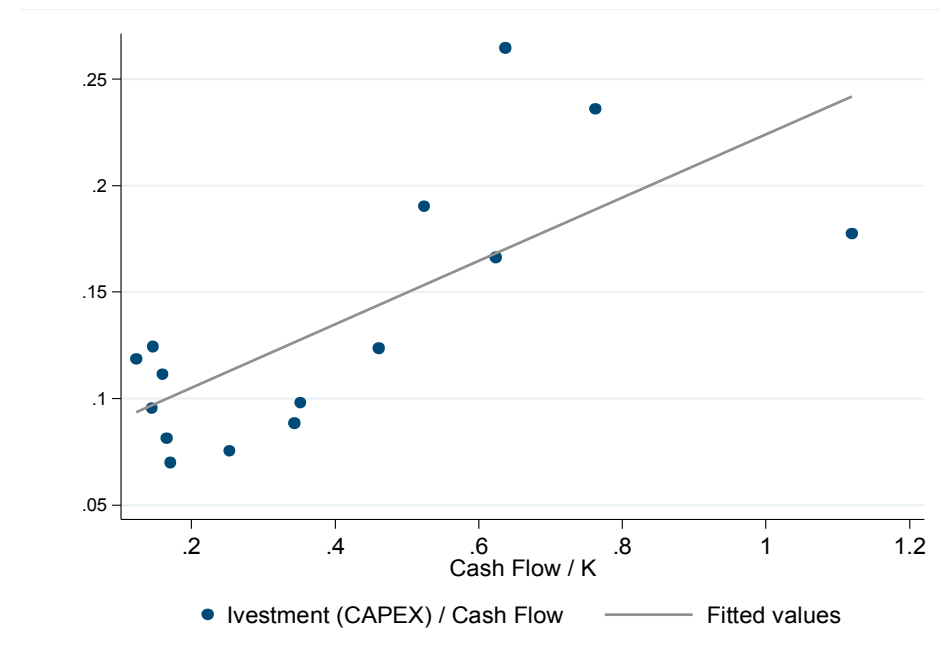
II. Impact on investment

- While the reduction in cash flows would partly translate in lower dividends, it would also limit investment in maintaining and expanding productive capacity in the Dead Sea as well as in marketing in foreign markets.
 - A well-established body of literature in corporate finance has found that cash flows influence investment levels in most industries. (See e.g. Fazzari, Hubbard & Petersen, 1988.)
 - This relationship holds true whether firms are in financial distress or not, and irrespective of their dividend policies.
 - The logic behind this relationship is simple: due to frictions and imperfections in capital markets, companies find it cheaper to fund investment with their internal resources (i.e. cash flows) rather than external funds (i.e. equity and debt). As a result, investment is cash-flow sensitive.

II. Impact on investment (cont.)

- There is a strong correlation between DSW's and ICL's investment and cash flow levels.
- Using actual ICL data, I find that the cash flow sensitivity of investment is both economically and statistically significant.
- The elasticity of investment to changes in cash flows I calculate is likely to underestimate the future response of investment to reductions in cash flows.

ICL's investment and cash flow:
1997-2012



II. Impact on investment (cont.)

- A regression analysis demonstrates the existence of a positive and statistically significant relationship between investment and cash flow amongst companies operating in the global potash market, even after accounting for differences in investment opportunities.

II. Impact on investment (cont.)

- It is common cause that a tax policy that sets an upper limit on profits will have a detrimental effect on firms' incentives to invest.
 - Given that profits are uncertain ex ante, a firm would be willing to invest only if the expected return on its investment exceeds the cost of capital.
 - A tax on profits imposes a limit on the firm's expected revenue, because it reduces ex post profits when market circumstances are positive. In other words, a tax on excessive profits limits the company's upside while leaving it fully exposed downside. As a result, it reduces incentives to invest.
 - The disincentive effect of the new profit tax is exacerbated by the regressive nature of the current fiscal regime, as explained by Mr. Rosen.

III. Impact on competitive position

- DSW's market share is directly related to its productive capacity and its ability to engage in costly marketing activities. Both productive capacity and marketing activity are positively affected by investment and, hence, cash flows.
 - The potash business is investment intensive. I understand that DSW's capacity utilisation rate is very high and that DSW sells all of its production. So, DSW will only be able to maintain (or grow) its share of the market if it is able to invest to maintain (or grow) its capital base.
 - DSW competes in foreign markets with companies enjoying incumbency advantages: acquiring new customers is costly.
 - The reduction in investment caused by the profit tax would therefore erode DSW's capacity, its ability to invest in new customer acquisitions and, therefore, its market shares.

III. Impact on competitive position (cont.)

- According to the analysis I have performed using DSW's data for the last twelve years, the link between investment and production capacity is positive and both economically and statistically significant.
- Thus, a significant permanent reduction in investment would erode DSW's total potash capacity.
- Using data on market shares and capacity for the main potash producers world-wide, I find a statistically and economically significant relationship between DSW's relative capacity and its market share.

III. Impact on competitive position (cont.)

- DSW's competitors face a smaller fiscal burden.
- According to Mr. Rosen, the State's share in the profits of ICL is not only higher in absolute terms, it is the highest among the countries that produce potash.



ICL is placed at a disadvantage to its competitors, who can spend more in productive capacity and marketing and raise capital at a lower cost.

Conclusions

- I have shown that a tax on DSW's profits would reduce DSW's investment in productive capacity and would gradually and cumulatively erode DSW's competitiveness in the world potash.
- It follows that the State of Israel should not presume that a tax on profits would generate an increase in GT. Given the high level of GT, in both absolute and relative terms, and the declining trend in potash prices, a tax on profits is bound to hurt DSW's sales, revenues and profits and thus negatively impact the GT.



Thank you for your
attention!