

# Implications of Corporate Taxation

BEROC conference, Minsk

Yuri Tserlukevich

Arizona State University and Hong Kong University of  
Science and Technology.

December 28, 2009

# The Plan

- This is a work in progress that attempts link together (a) Belarus tax law situation (b) developments in the international tax law (c) recent academic findings on corporate finance taxation.

# The Plan

- This is a work in progress that attempts link together (a) Belarus tax law situation (b) developments in the international tax law (c) recent academic findings on corporate finance taxation.
- Economics offers a social perspective, I will look at actions induced by tax on the firm level.

# The Plan

- This is a work in progress that attempts link together (a) Belarus tax law situation (b) developments in the international tax law (c) recent academic findings on corporate finance taxation.
- Economics offers a social perspective, I will look at actions induced by tax on the firm level.
- I adhere to the plan outlined by three questions (subject to jetlag).

# The Plan

- 1 Where (and why) do we stand internationally on the issue of corporate tax?
- 2 (Anticipating the answer) if the change is imminent, what do we learn from the academic perspective?
- 3 How should the law evolve in responsible way? View the examples.

# Belarus Experience

The 2010 IFC report on tax across the countries

- The report is 183 country survey assessing the administrative burden for companies to comply with tax regulations. It is based on:

# Belarus Experience

The 2010 IFC report on tax across the countries

- The report is 183 country survey assessing the administrative burden for companies to comply with tax regulations. It is based on:
- (1) Total administrative cost measured by the number of payments and the number of hours required to file the tax.

# Belarus Experience

The 2010 IFC report on tax across the countries

- The report is 183 country survey assessing the administrative burden for companies to comply with tax regulations. It is based on:
- (1) Total administrative cost measured by the number of payments and the number of hours required to file the tax.
- (2) Companies' total tax liability as a percentage of pre-tax profits.

# Belarus Experience

The 2010 IFC report on tax across the countries

- The report is 183 country survey assessing the administrative burden for companies to comply with tax regulations. It is based on:
  - (1) Total administrative cost measured by the number of payments and the number of hours required to file the tax.
  - (2) Companies' total tax liability as a percentage of pre-tax profits.
  - (3) Access to relevant information.

# Belarus Experience

And the winners are...(1 means the easiest to pay tax)

- 1 Maldives
- 2 Qatar
- 3 Hong Kong**
- 4 United Arab Emirates

- 180 Republic of Congo
- 181 Ukraine
- 182 Venezuela
- 183 Belarus**

# Why?

- Number of tax payments per year was 107 (compare to HK's 4 payments!)

# Why?

- Number of tax payments per year was 107 (compare to HK's 4 payments!)
- One of the slowest processes of filing, 900 hours (still comparable to the time in the USA).

# Why?

- Number of tax payments per year was 107 (compare to HK's 4 payments!)
- One of the slowest processes of filing, 900 hours (still comparable to the time in the USA).
- Total tax rate (as % of profit) 99.7%. Thanks! Keep the change!

# Why?

- Number of tax payments per year was 107 (compare to HK's 4 payments!)
- One of the slowest processes of filing, 900 hours (still comparable to the time in the USA).
- Total tax rate (as % of profit) 99.7%. Thanks! Keep the change!
- Are these fair measures?

# Why?

- Number of tax payments per year was 107 (compare to HK's 4 payments!)
- One of the slowest processes of filing, 900 hours (still comparable to the time in the USA).
- Total tax rate (as % of profit) 99.7%. Thanks! Keep the change!
- Are these fair measures?
- But, Belarus introduced an on-line tax portal in 2009.

# How did we get there?

- I don't know.
  - Ministry's response is measured. Abolishment of agricultural tax.

# How did we get there?

- I don't know.
  - Ministry's response is measured. Abolishment of agricultural tax.
  - Historical deficiencies of the socialistic system.

# How did we get there?

- I don't know.
  - Ministry's response is measured. Abolishment of agricultural tax.
  - Historical deficiencies of the socialistic system.
  - Our government is mending the budget by medieval methods—introducing new tax.

# How did we get there?

- I don't know.
  - Ministry's response is measured. Abolishment of agricultural tax.
  - Historical deficiencies of the socialistic system.
  - Our government is mending the budget by medieval methods—introducing new tax.
  - Why is this relevant?

There is a need for change, but we must work with a hindsight.

- Obviously, we are facing a tax reform in the near future.
-

# There is a need for change, but we must work with a hindsight.

- Obviously, we are facing a tax reform in the near future.
- - Anyone can contest this?

# There is a need for change, but we must work with a hindsight.

- Obviously, we are facing a tax reform in the near future.
- - Anyone can contest this?
  - For the rest of the talk, I focus on a single simple question:

# There is a need for change, but we must work with a hindsight.

- Obviously, we are facing a tax reform in the near future.
- - Anyone can contest this?
  - For the rest of the talk, I focus on a single simple question:
    - **What tax rate?**

# Corporate Taxation

- Rules that are nearly universal: tax base, convex/progressive tax schedule, permissible deductions.

# Corporate Taxation

- Rules that are nearly universal: tax base, convex/progressive tax schedule, permissible deductions.
- Accounting principles: (revenues net of expenses).  
Statement of Cash Flows?

# Corporate Taxation

- Rules that are nearly universal: tax base, convex/progressive tax schedule, permissible deductions.
- Accounting principles: (revenues net of expenses).  
Statement of Cash Flows?
- Carryforward and carryback rules.

# Corporate Taxation

- Rules that are nearly universal: tax base, convex/progressive tax schedule, permissible deductions.
- Accounting principles: (revenues net of expenses).  
Statement of Cash Flows?
- Carryforward and carryback rules.
- Deductions for explicit or implicit interest on liabilities, compensation expenses, foreign tax credits, etc.

# Corporate Taxation

- Rules that are nearly universal: tax base, convex/progressive tax schedule, permissible deductions.
- Accounting principles: (revenues net of expenses).  
Statement of Cash Flows?
- Carryforward and carryback rules.
- Deductions for explicit or implicit interest on liabilities, compensation expenses, foreign tax credits, etc.
- *Higher or lower* tax rate is A question.

# Corporate Taxation

- Rules that are nearly universal: tax base, convex/progressive tax schedule, permissible deductions.
- Accounting principles: (revenues net of expenses).  
Statement of Cash Flows?
- Carryforward and carryback rules.
- Deductions for explicit or implicit interest on liabilities, compensation expenses, foreign tax credits, etc.
- *Higher or lower* tax rate is A question.
- I will argue for LOWER tax based on the academic papers and the experience from other countries.

# Argument for moderate taxation

- Firms adopt the suboptimal policies attempting to minimize the tax bills. We could briefly look at:

# Argument for moderate taxation

- Firms adopt the suboptimal policies attempting to minimize the tax bills. We could briefly look at:
- (A) Leverage policy.

# Argument for moderate taxation

- Firms adopt the suboptimal policies attempting to minimize the tax bills. We could briefly look at:
  - (A) Leverage policy.
  - (B) Compensation policy.

# Argument for moderate taxation

- Firms adopt the suboptimal policies attempting to minimize the tax bills. We could briefly look at:
  - (A) Leverage policy.
  - (B) Compensation policy.
  - (C) Savings policy.

# Leverage policy

- In most countries heavy taxation makes borrowing a prime source of financing.

# Leverage policy

- In most countries heavy taxation makes borrowing a prime source of financing.
- Deductibility of the interest payments.

# Leverage policy

- In most countries heavy taxation makes borrowing a prime source of financing.
- Deductibility of the interest payments.
- Trade-offs with individual tax, bankruptcy costs, constrained decisions, agencies.

# Leverage policy

- In most countries heavy taxation makes borrowing a prime source of financing.
- Deductibility of the interest payments.
- Trade-offs with individual tax, bankruptcy costs, constrained decisions, agencies.
- In addition to being high, debt policies at times appear shocking.

# Consider a Firm with Debt Financing

- From the tax perspective, interest payments must match the profit.

# Consider a Firm with Debt Financing

- From the tax perspective, interest payments must match the profit.
- If debt is lower, firms will pay extra tax on profits.

# Consider a Firm with Debt Financing

- From the tax perspective, interest payments must match the profit.
- If debt is lower, firms will pay extra tax on profits.
- If debt is too high, firms cannot take further deductions, trigger extra interest tax, and run the risk of bankruptcy.

# Consider a Firm with Debt Financing

- From the tax perspective, interest payments must match the profit.
- If debt is lower, firms will pay extra tax on profits.
- If debt is too high, firms cannot take further deductions, trigger extra interest tax, and run the risk of bankruptcy.
- Such policy, yielding zero tax to the government, results in the distortions, especially if the firm invests.

# Implications for Firms with Investment Options

- Obvious troubles. Debt overhang, too prohibitive covenants.
- Financing of Growth Firms provides indirect evidence that tax has large implications on the real policies.
- Companies with valuable investment options do not borrow enough.
- High tax induces hard-to-explain leverage dynamics as if firms could not adjust their financing.

# Compensation policies

- You may know that compensation is deductible as a basic firm expense.
-

# Compensation policies

- You may know that compensation is deductible as a basic firm expense.
- - Leads to reduction in the marginal tax.

# Compensation policies

- You may know that compensation is deductible as a basic firm expense.
- - Leads to reduction in the marginal tax.
  - However to lower the marginal tax firms impose more options on risk-averse workers and shift compensation toward stock options.

# An example: compensation policy, options, wages, debt

- Imagine we are looking at the firm that tries to optimize the tax bills by matching profits with deductions (interest payments and compensation expenses).

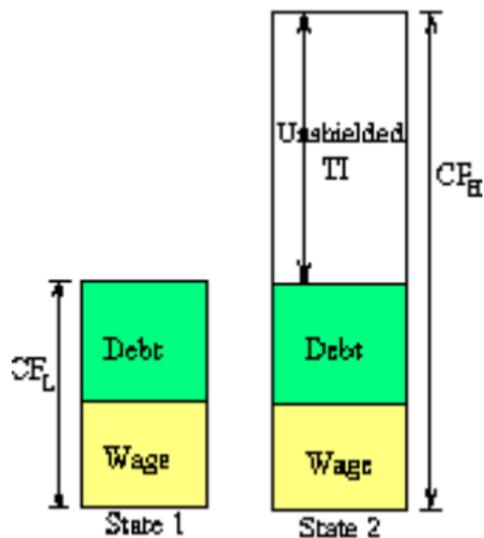
# An example: compensation policy, options, wages, debt

- Imagine we are looking at the firm that tries to optimize the tax bills by matching profits with deductions (interest payments and compensation expenses).
- Assume that there is some debt, fix it for now.

# An example: compensation policy, options, wages, debt

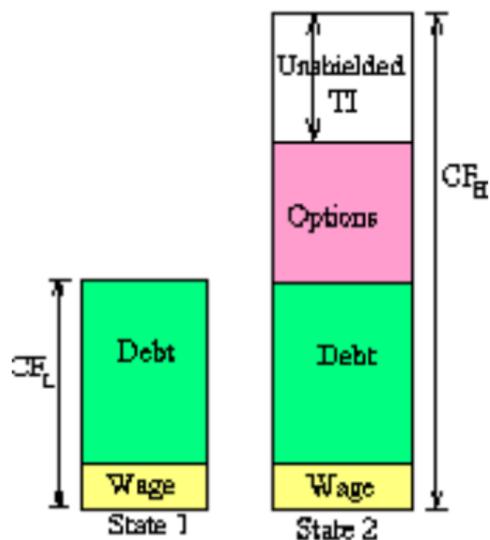
- Imagine we are looking at the firm that tries to optimize the tax bills by matching profits with deductions (interest payments and compensation expenses).
- Assume that there is some debt, fix it for now.
- Compensation is wages (flat) and options that are exercised when the firm is profitable.

# Compensation Structure I



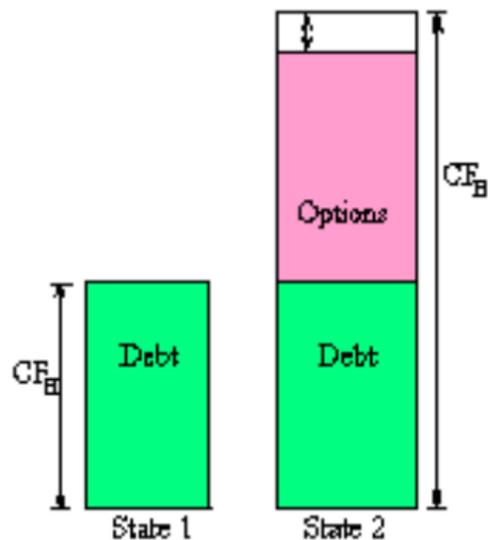
Wages and No Options

# Compensation Structure II



Wages and Options

# Compensation Structure III



Options and No Wages

# Briefly: Savings.

- High tax creates preference for smaller savings

# Policy advice—lobby for a lower tax.

- High tax creates measurable distortions.

# Policy advice—lobby for a lower tax.

- High tax creates measurable distortions.
- Creation of attractive business environment (another tax heaven?)

# Policy advice—lobby for a lower tax.

- High tax creates measurable distortions.
- Creation of attractive business environment (another tax heaven?)
- Experience of some Asian countries (Hong Kong or Singapore).

# Examples of the Tax Rates, Internationally

(includes profit, labor, and other taxes)

Country	$T_C$
Hong Kong	24.2%
...	
United States	46.3%
...	
Italy	68.4%

# Conclusions.

- We should expect a radical simplification in Belarus tax system, first changes are already happening.

# Conclusions.

- We should expect a radical simplification in Belarus tax system, first changes are already happening.
- I argue for lowering the tax rates that historically were high.

# Conclusions.

- We should expect a radical simplification in Belarus tax system, first changes are already happening.
- I argue for lowering the tax rates that historically were high.
- Academic finance literature convincingly shows that (a) high tax leads to suboptimal strategies (b) does not necessarily result in increased collection.

# Conclusions.

- We should expect a radical simplification in Belarus tax system, first changes are already happening.
- I argue for lowering the tax rates that historically were high.
- Academic finance literature convincingly shows that (a) high tax leads to suboptimal strategies (b) does not necessarily result in increased collection.
- Additionally, there are number of indirect benefits.