

Ukraine and Security of Gas Supplies to Europe

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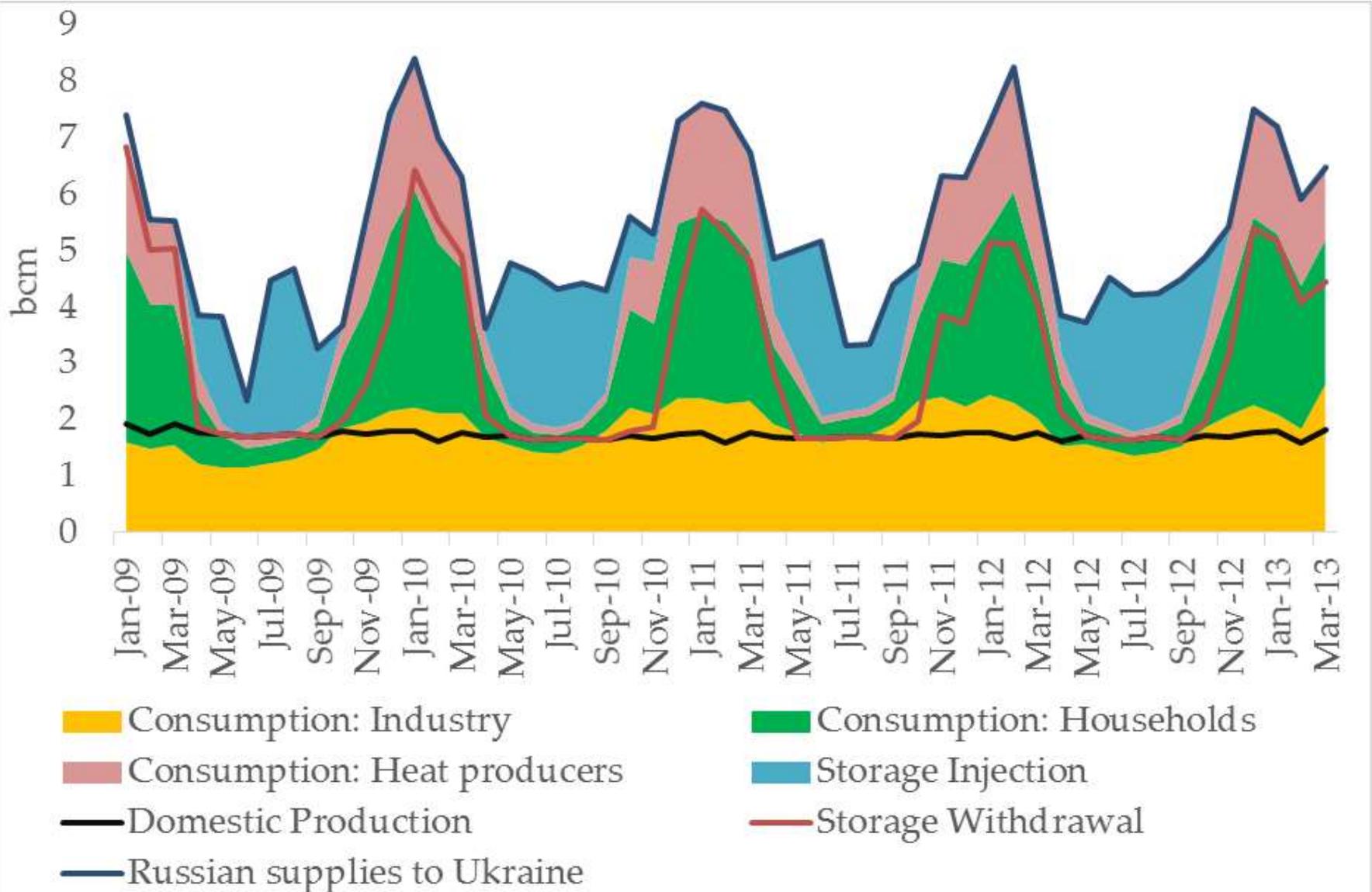
Contents

- The current situation
- Gas in Ukraine's economy and politics
- Options for diversification
- Conclusions

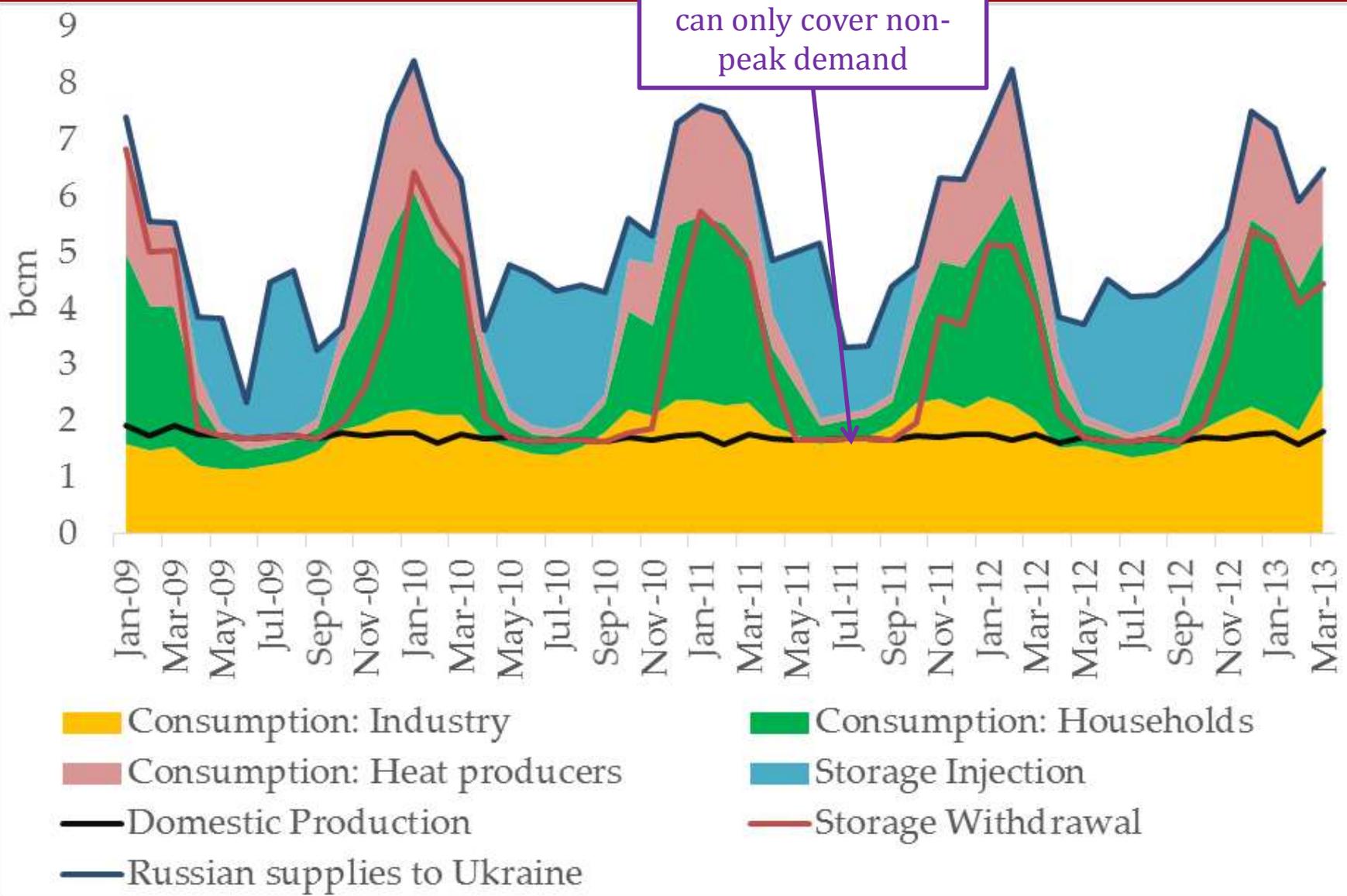
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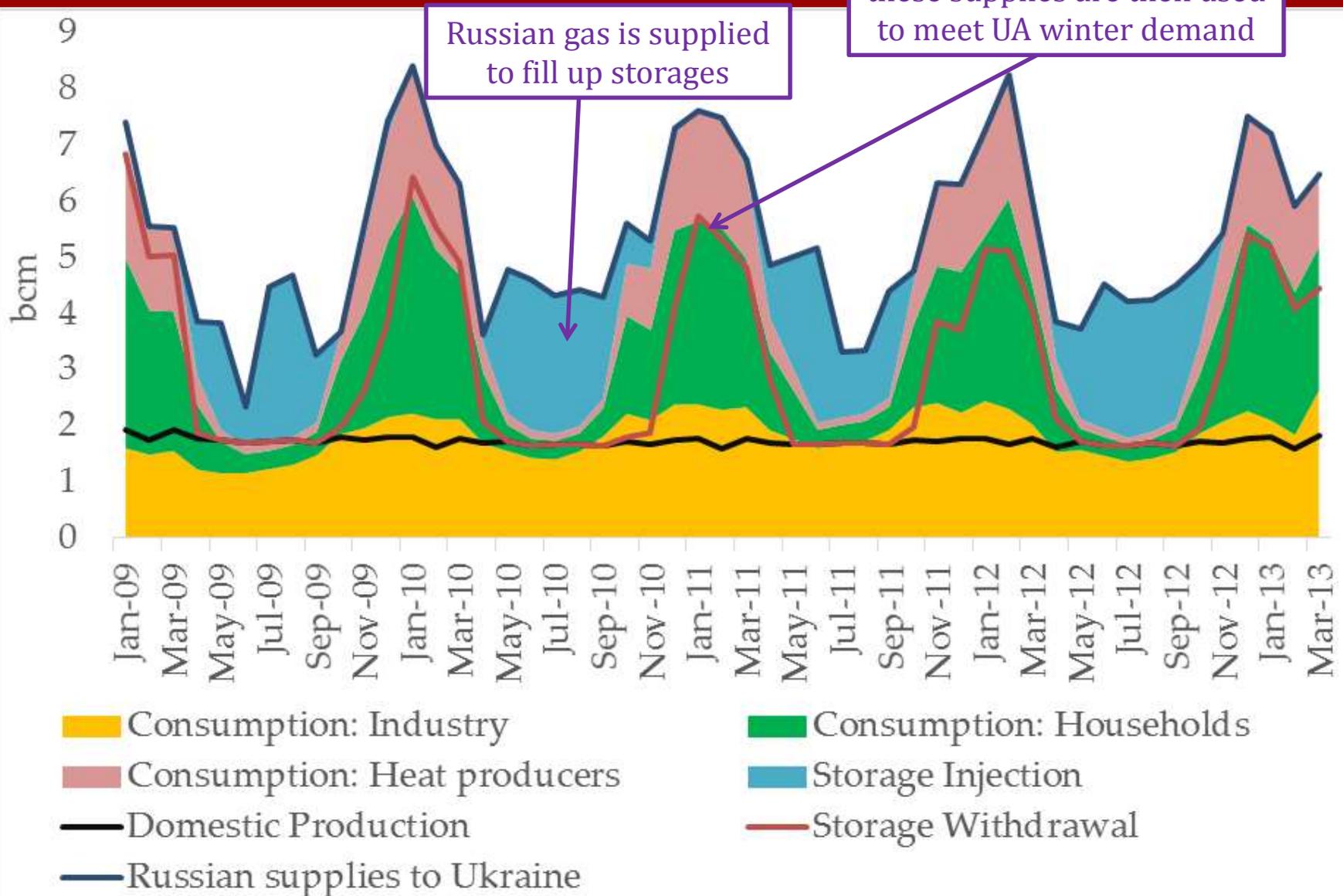
A looming gas crisis?



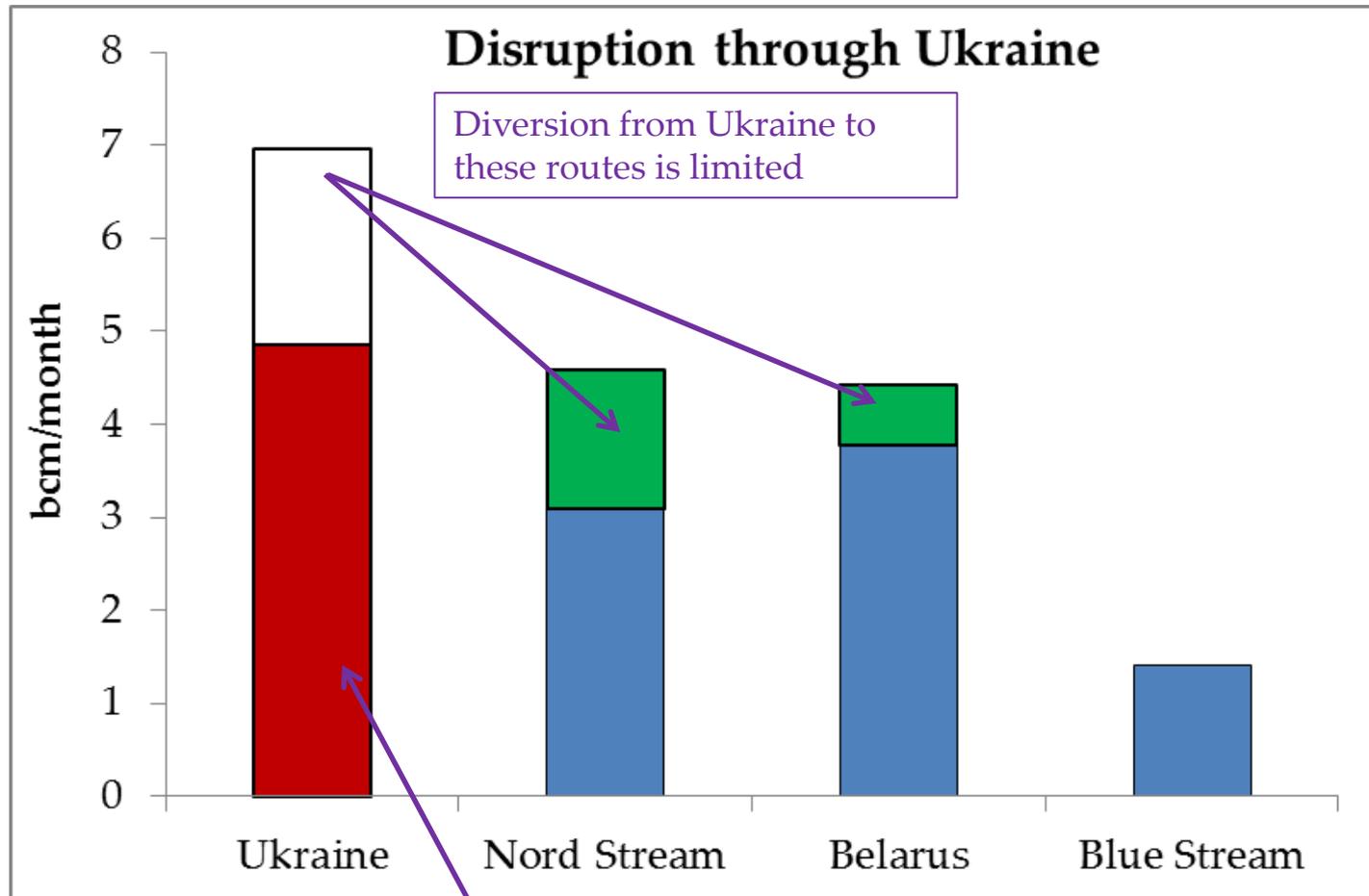
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A looming gas crisis?

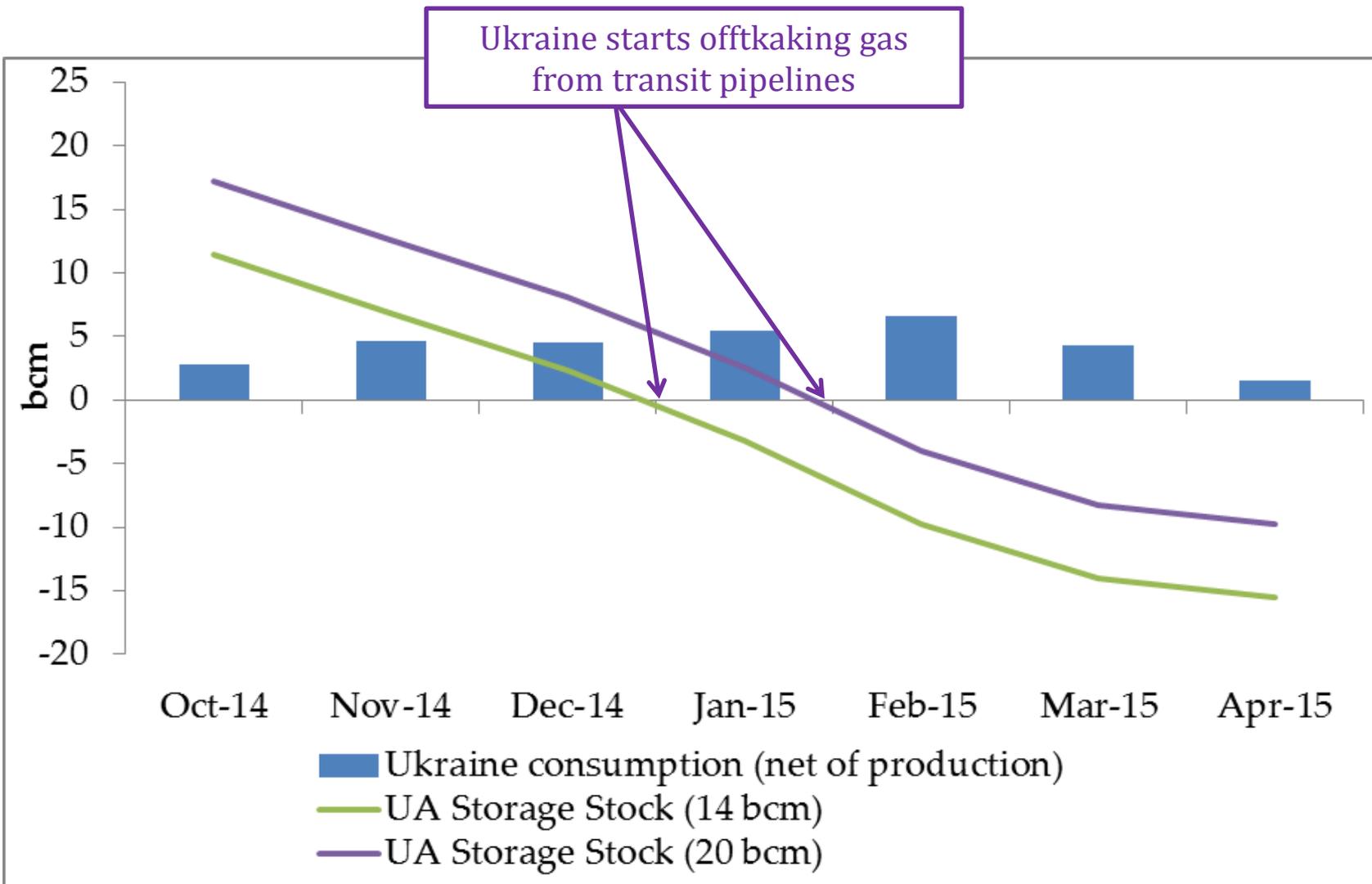


Ukraine's storage stock and Russian alternative pipelines are not sufficient to avert the potential crisis



undelivered gas in January

Ukraine's storage stock and Russian alternative pipelines are not sufficient to avert the potential crisis

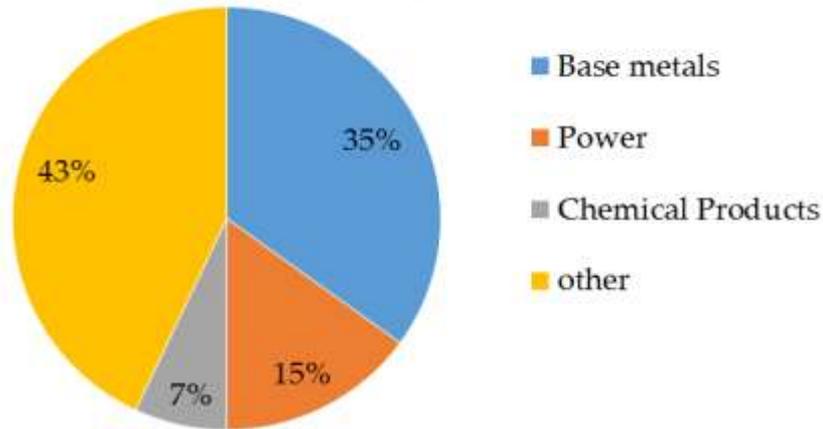


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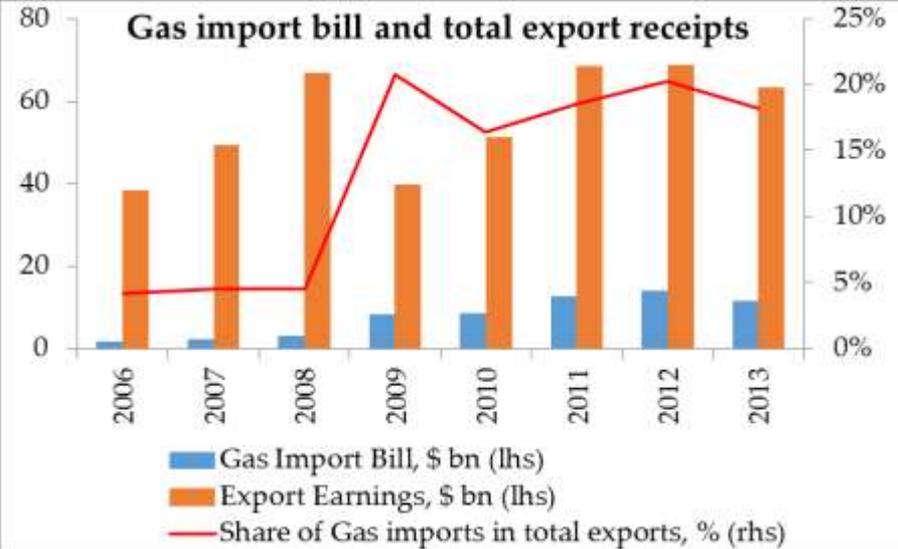
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Half of Ukraine's GDP depends on gas-consuming industries

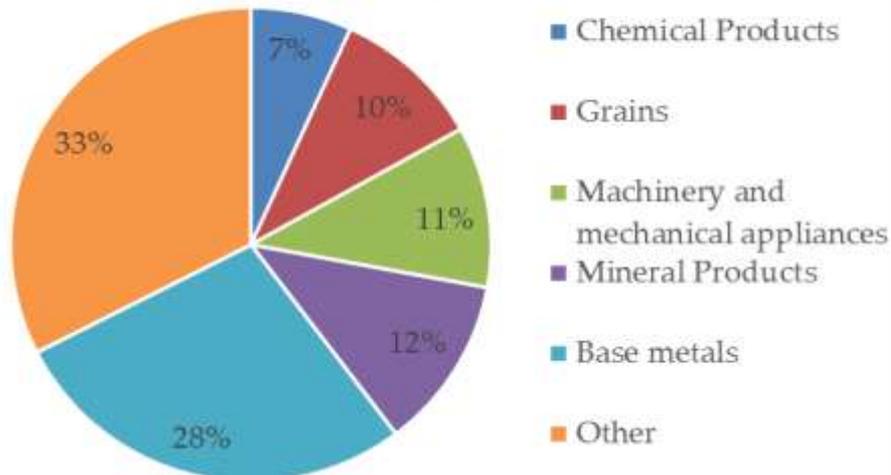
Major gas-consuming industries (% of GDP)



Gas import bill and total export receipts

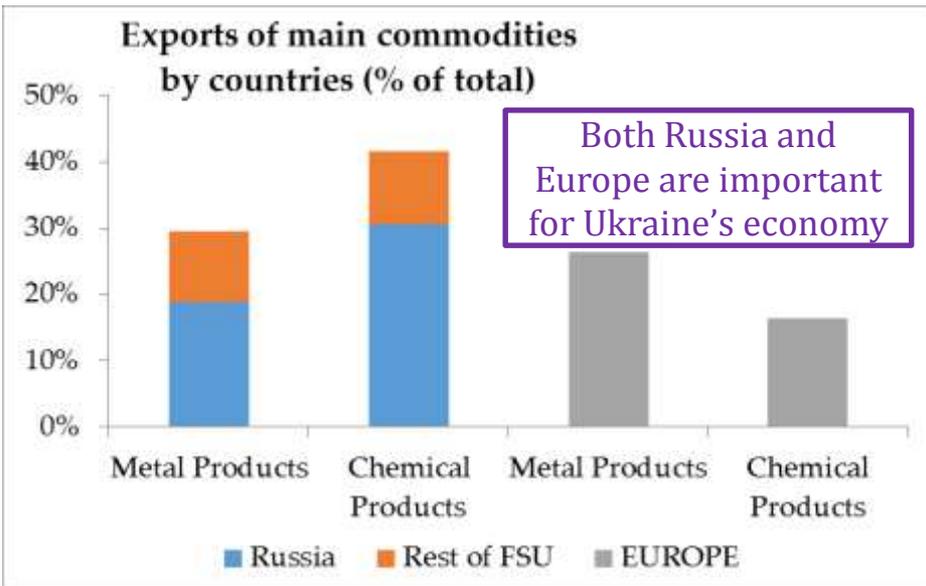


Ukraine's export structure



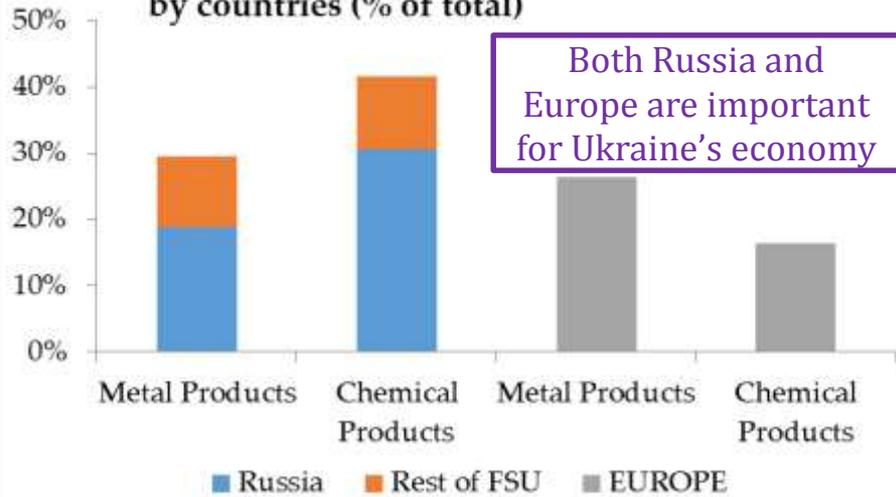
High gas price represents some danger to the growth-generating industries as well as Ukraine's macroeconomic conditions

Economic and gas dependency on Russia



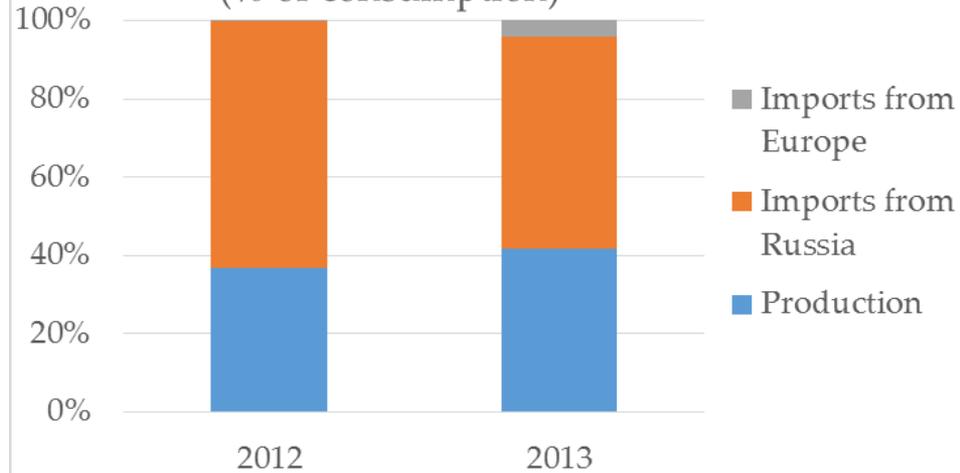
Economic and gas dependency on Russia

Exports of main commodities by countries (% of total)

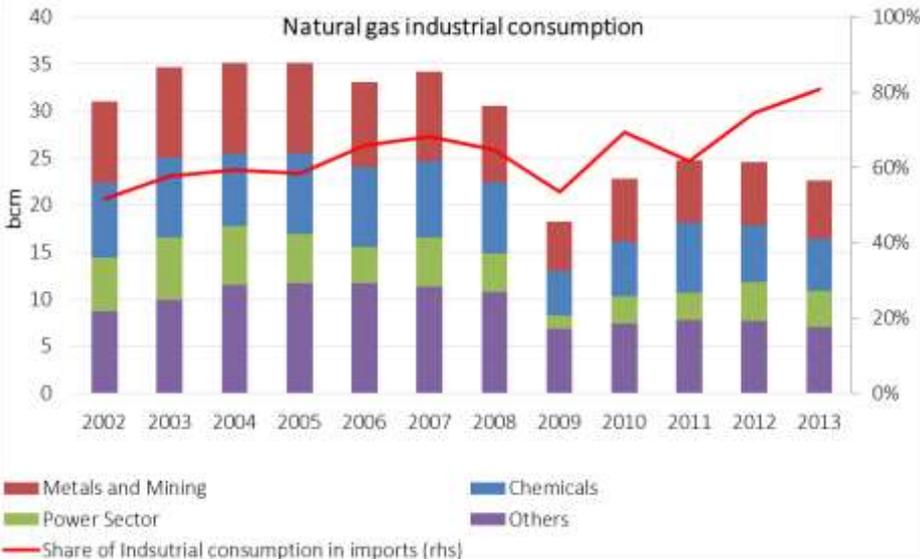


Both Russia and Europe are important for Ukraine's economy

Gas supply by sources (% of consumption)

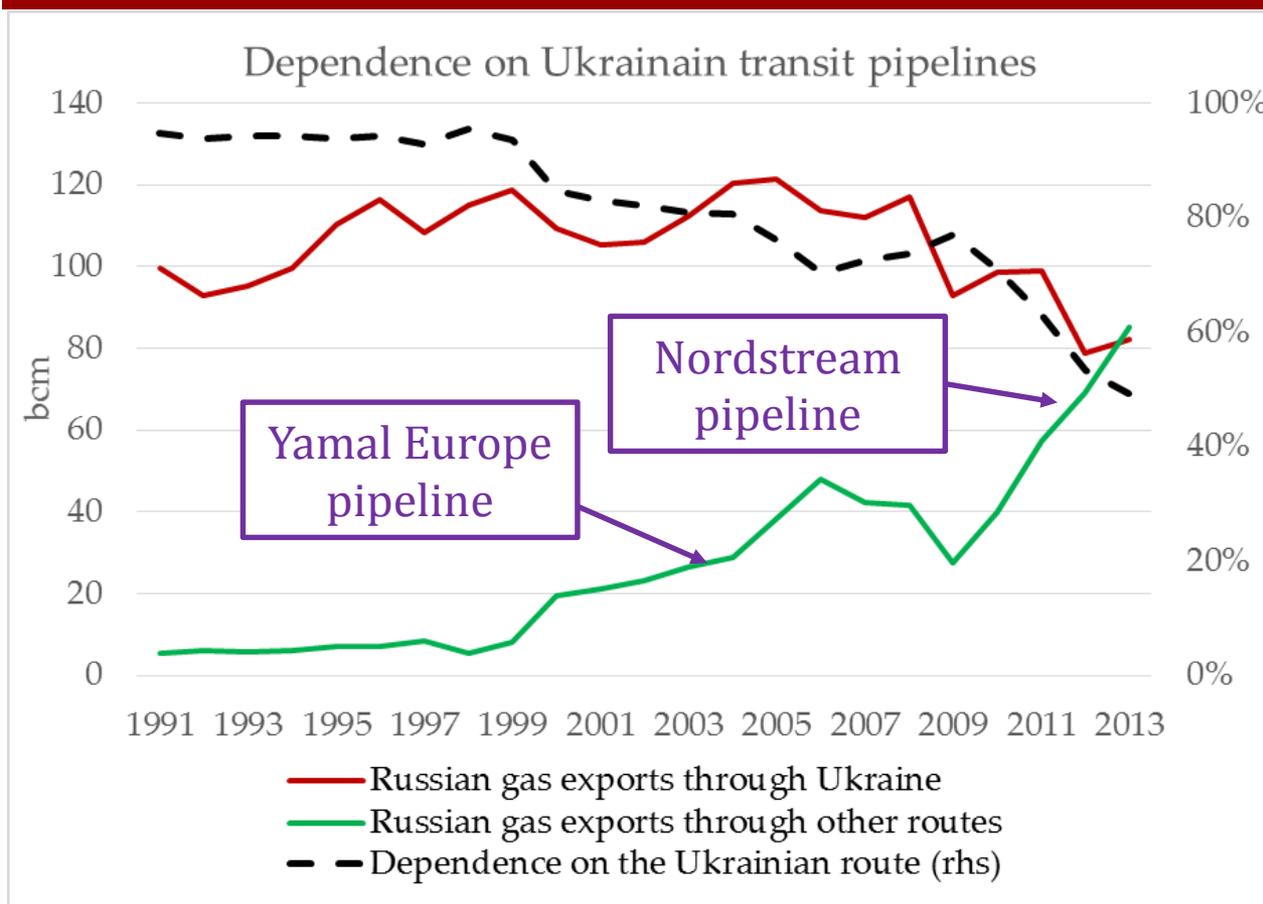


Natural gas industrial consumption



but Russia is more important for economic & energy security reasons

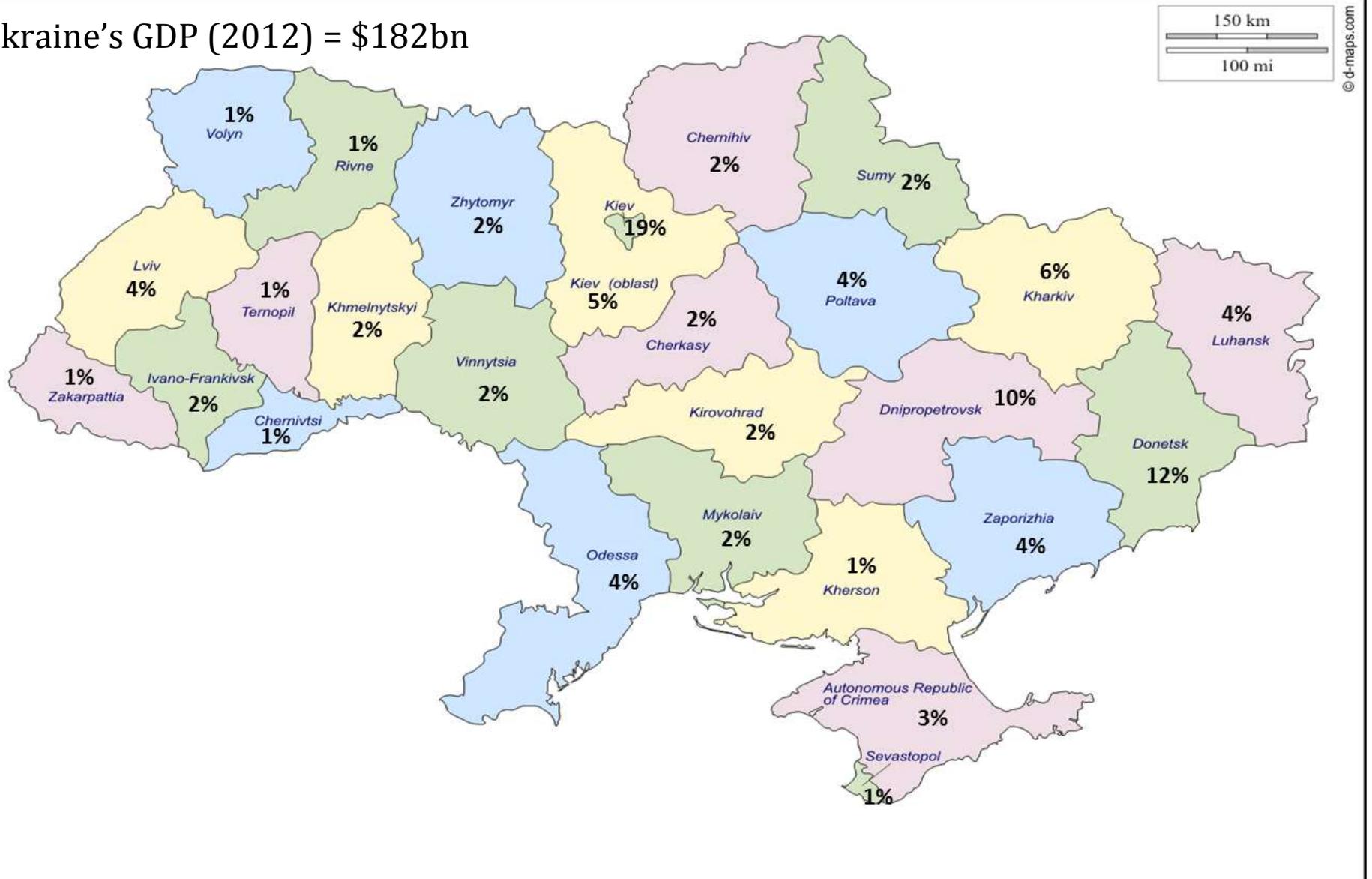
Ukraine's gas transit pipelines - strategic weapon?



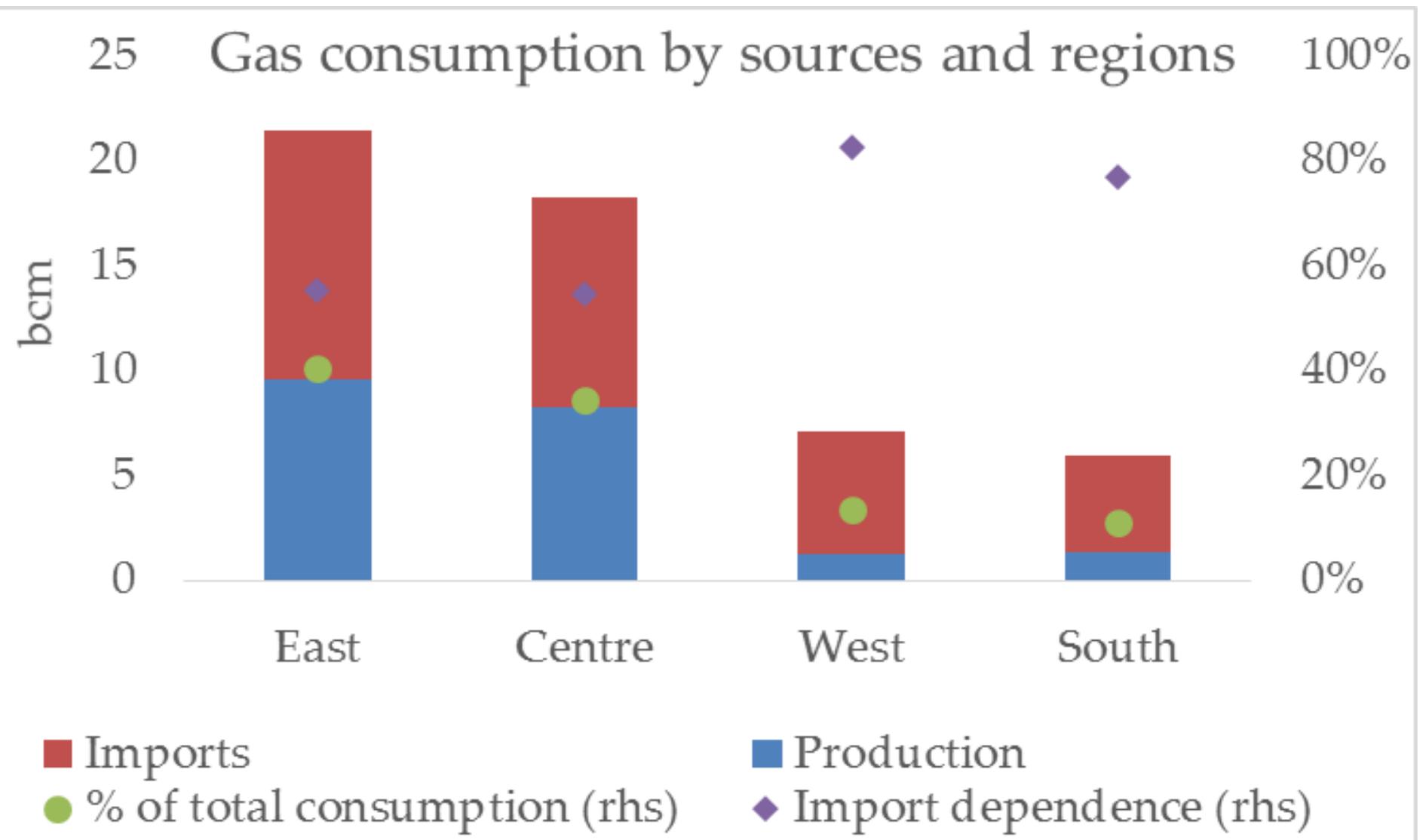
- Reduction in Ukraine's gas transit volume to Europe is due to diversion of gas to Nord Stream (Russia-Germany pipeline)
- Russia was able to diversify away from Ukraine since 1991 reducing its reliance on Ukraine from 95% to 49% at the moment
- After the South Stream, another bypass pipeline, is completed Russia's dependence on Ukraine will zero

Ukraine's economy: regional snap shot

Ukraine's GDP (2012) = \$182bn

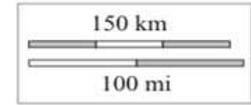


Ukraine's economy: regional snapshot

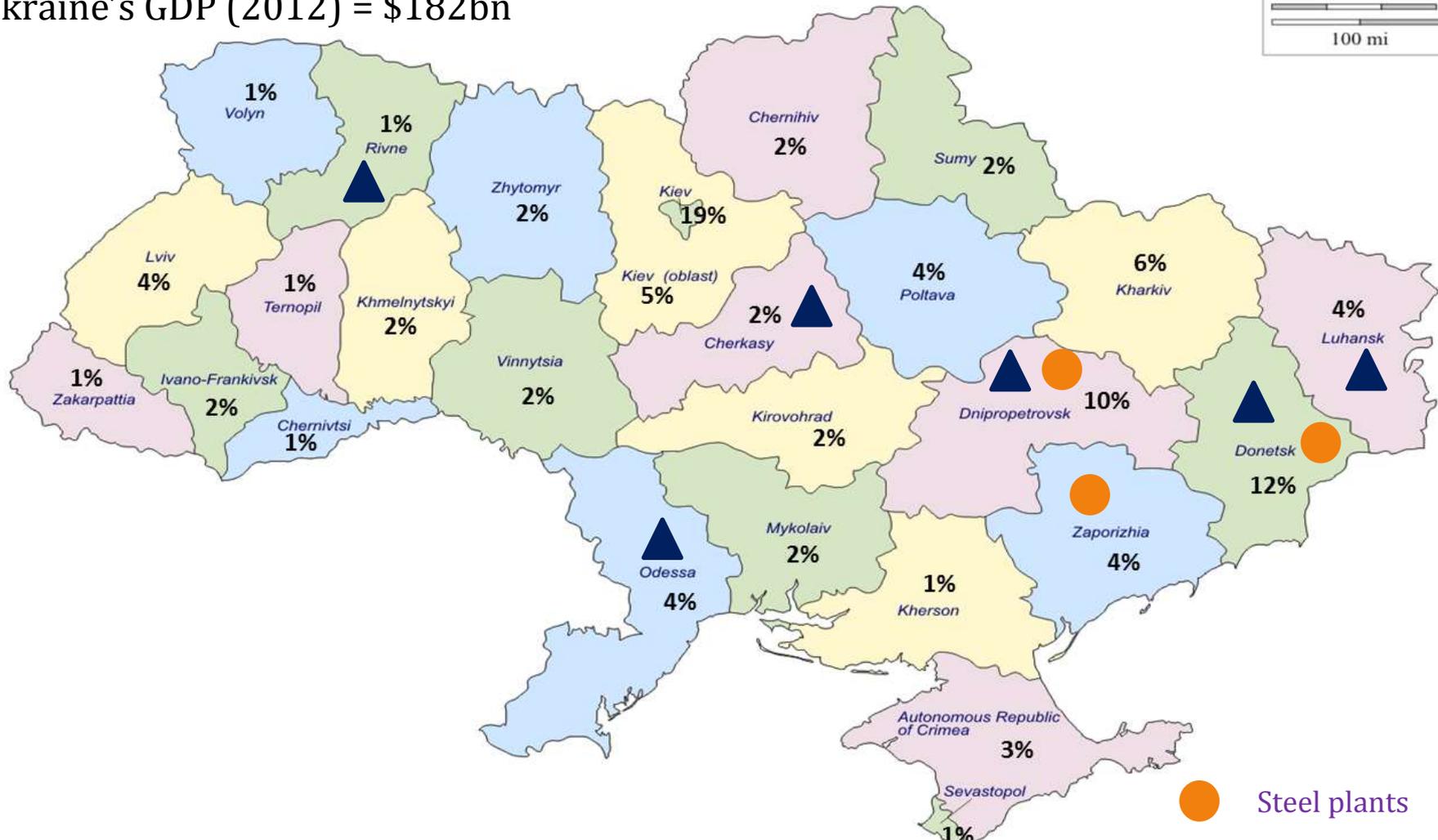


Ukraine's economy: regional snapshot

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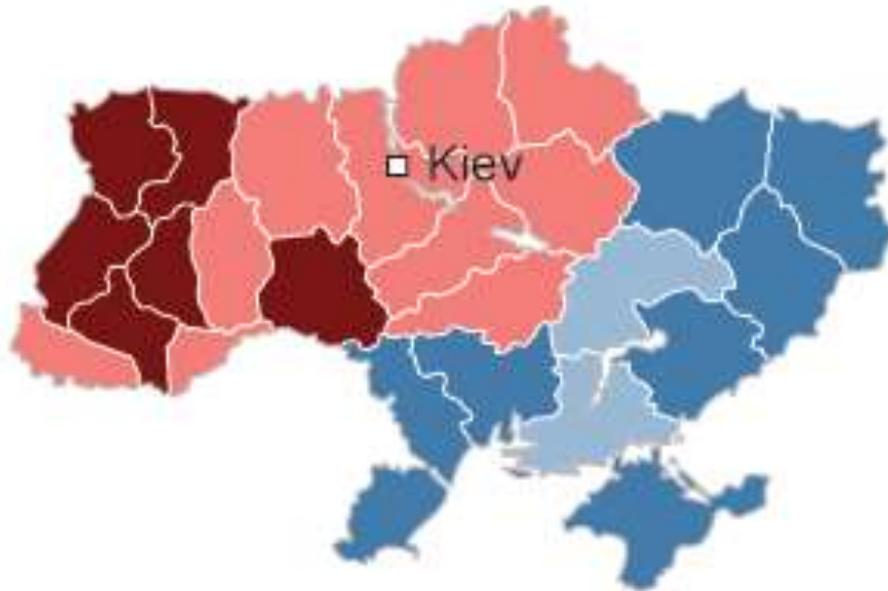
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Ukraine's politics: regional snap shot

Ukraine's divide

2010 election results



Tymoshenko ■ 70%+ ■ 50-69%
Yanukovich ■ 70%+ ■ 50-69%

Russian as native language



■ Less than 20% ■ 20-50% ■ 50%+

Source: BBC

Source: 2001 national census

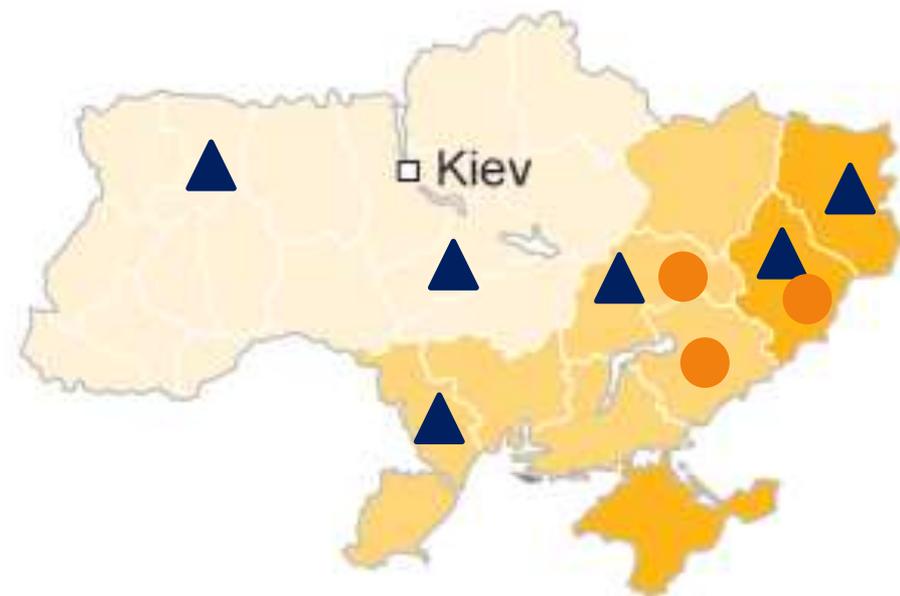
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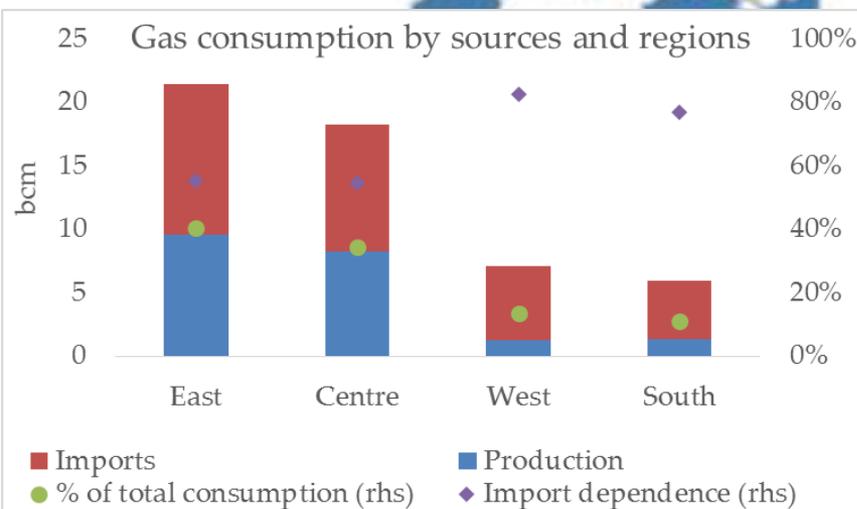
Russian as native language



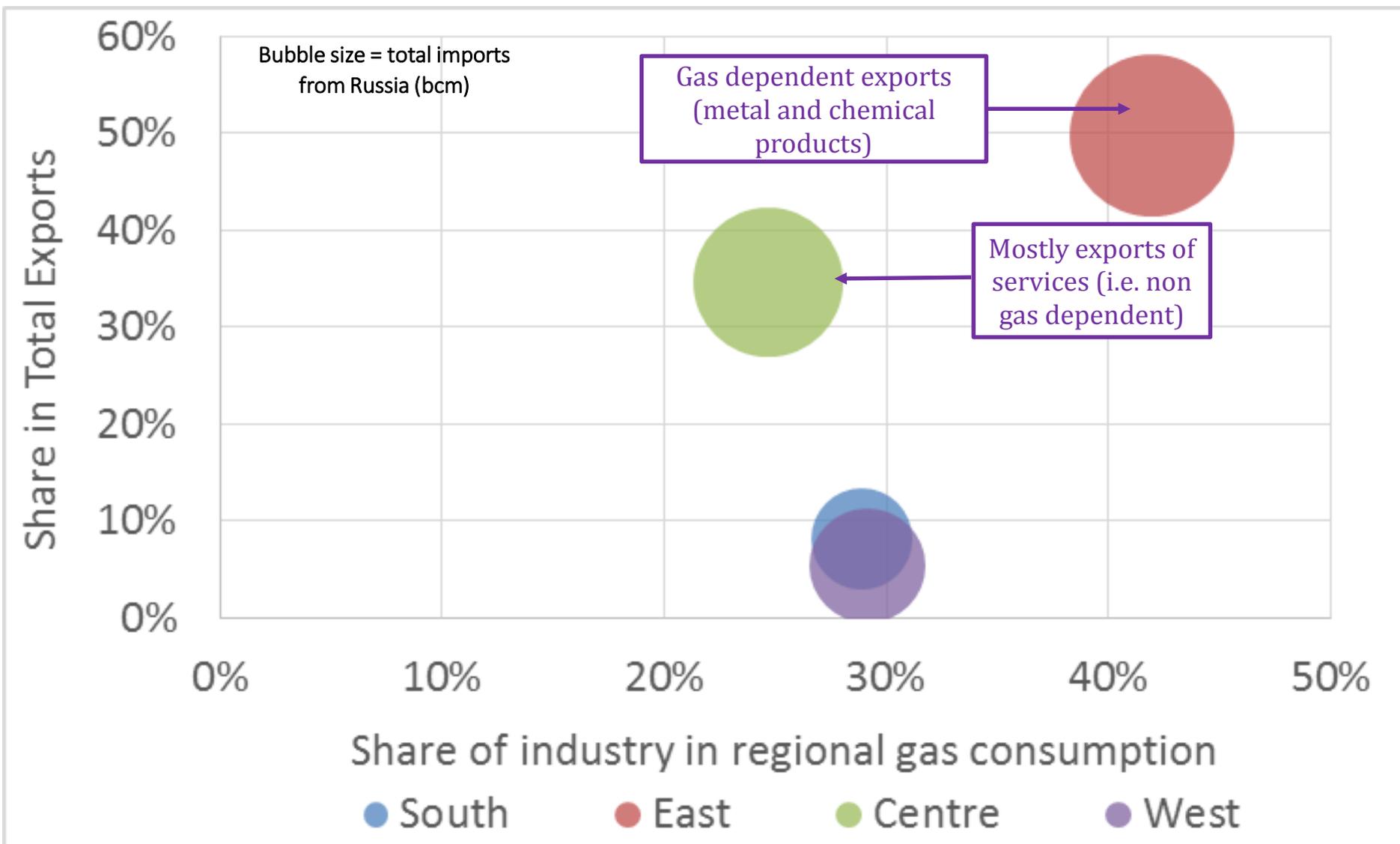
Less than 20% 20-50% 50%+

Source: 2001 national census

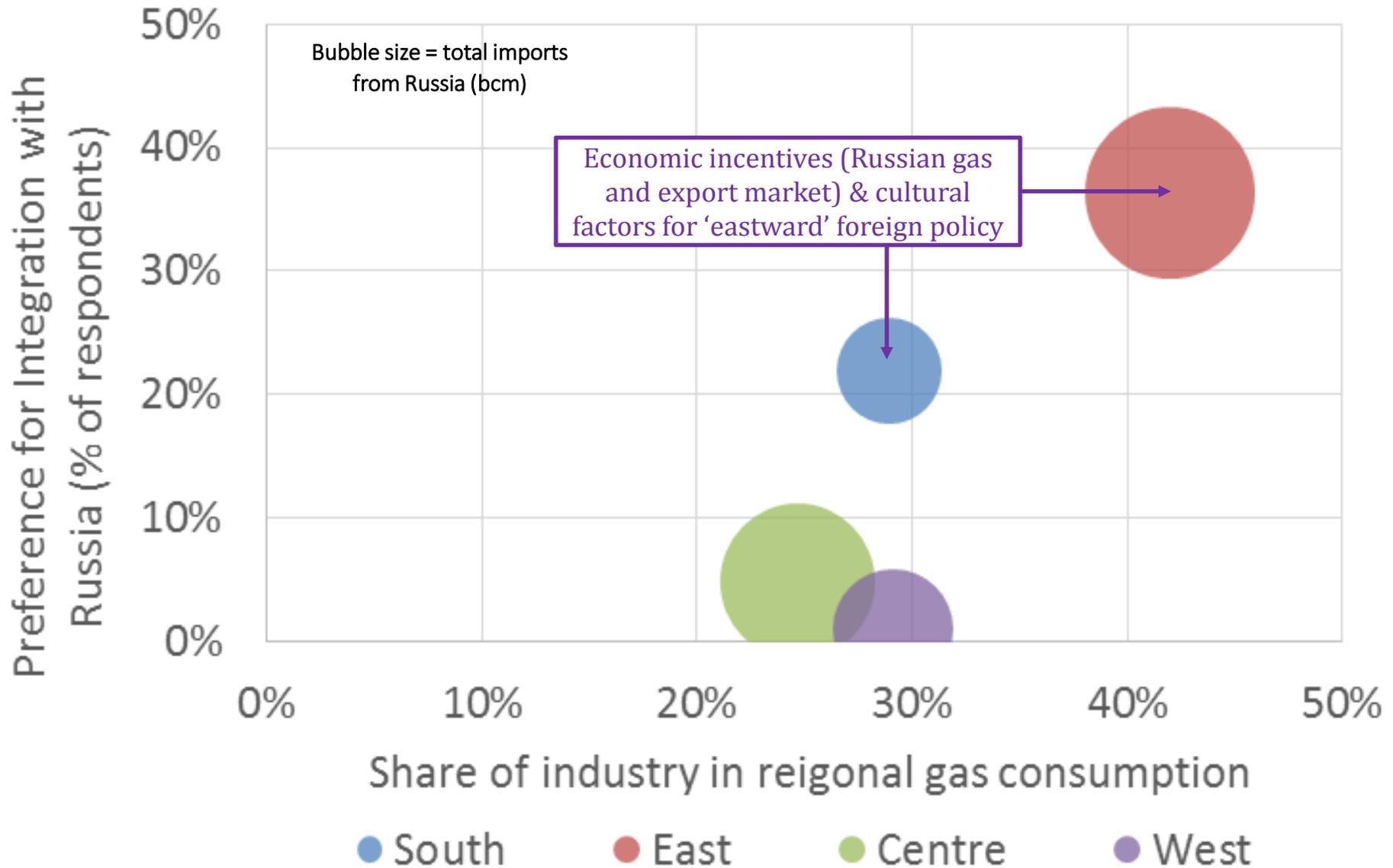
- Steel plants
- ▲ Chemical plants



Russian gas price affects economic competitiveness of Ukraine's industrialised east



Russian gas strongly influence Ukraine's foreign & energy policies



Russian gas and corruption strongly influence Ukraine's foreign & energy policies

Barter madness: 12 million galoshes for 4 million people in a 40°C heat

After the fall of the Soviet Union, high inflation rates and scarce hard currency made cash transactions unattractive in countries such as Ukraine. Instead, resources such as oil and gas were often swapped for other items which the country was in short supply of – food products, fertiliser, metal, equipment. Before the Russian financial crash of August 1998 this trade in barter dominated Ukraine's energy sector; it has been estimated by one commentator in the *Financial Times* that 90% of all energy commodities in Ukraine in the mid to late 1990s was paid for in barter.¹⁵⁸



Source: Global Witness (2006) 'It's a Gas: Funny Business in the Turkmen-Ukraine Gas Trade'

Russian gas and corruption strongly influence Ukraine's foreign & energy policies

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Ukraine's energy policy =

state capturing in the energy sector

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Undiversified economy which depends on energy imports and inefficient energy sector

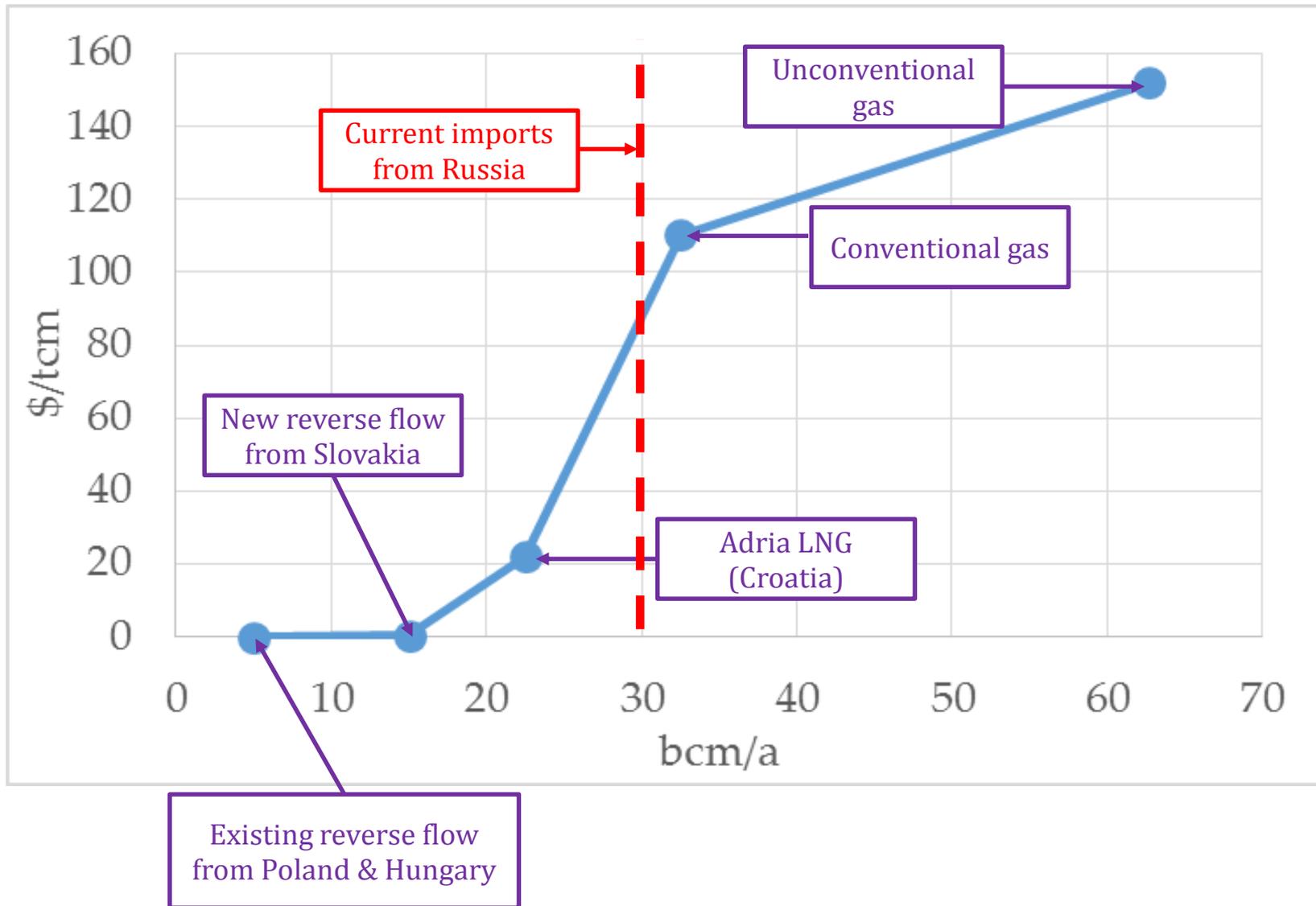
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regional difference in dependency on Russian gas for production of key export commodities

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Potential non-Russian supply options for Ukraine



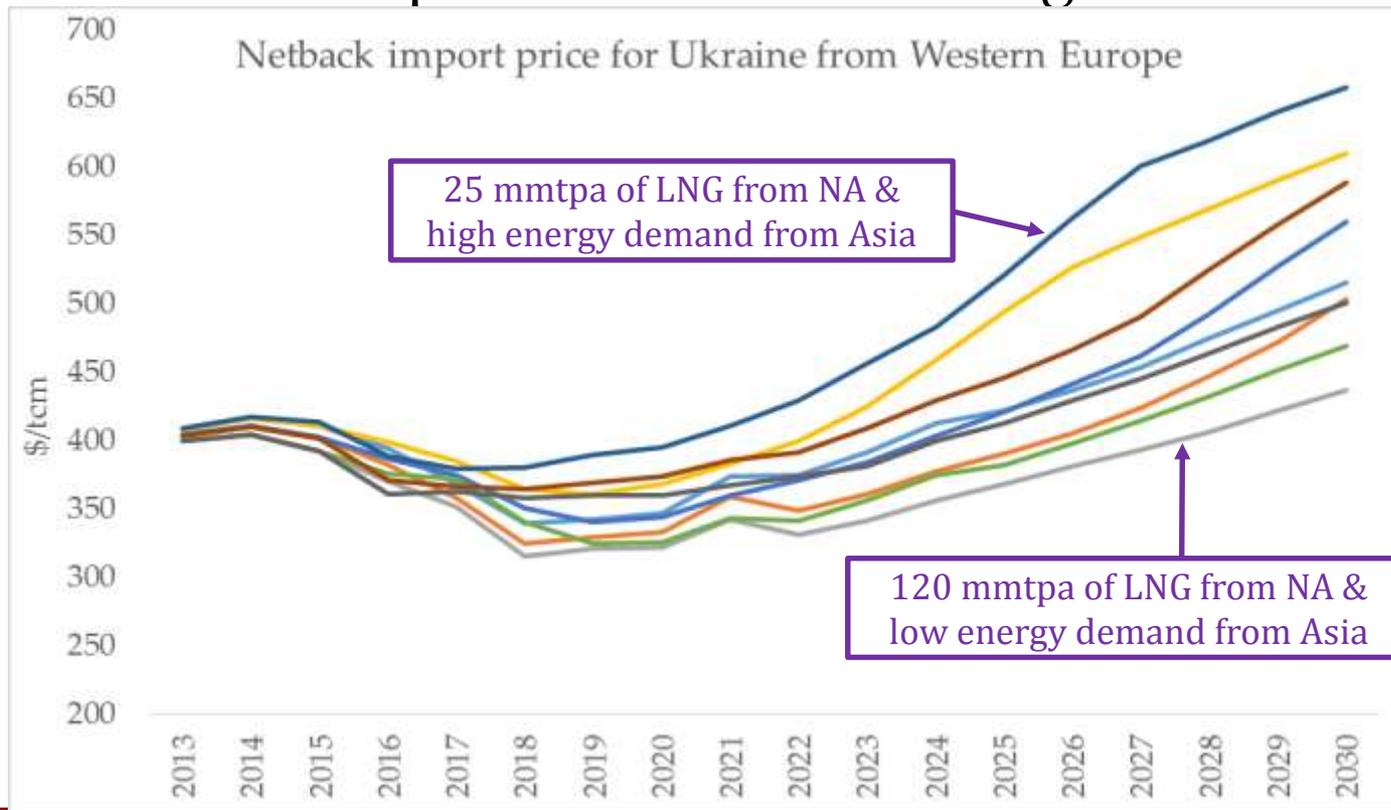
Potential non-Russian supply options for Ukraine

- How much diversification would Ukraine need?
 - How much gas would Ukraine receive from Europe?
 - At what price?

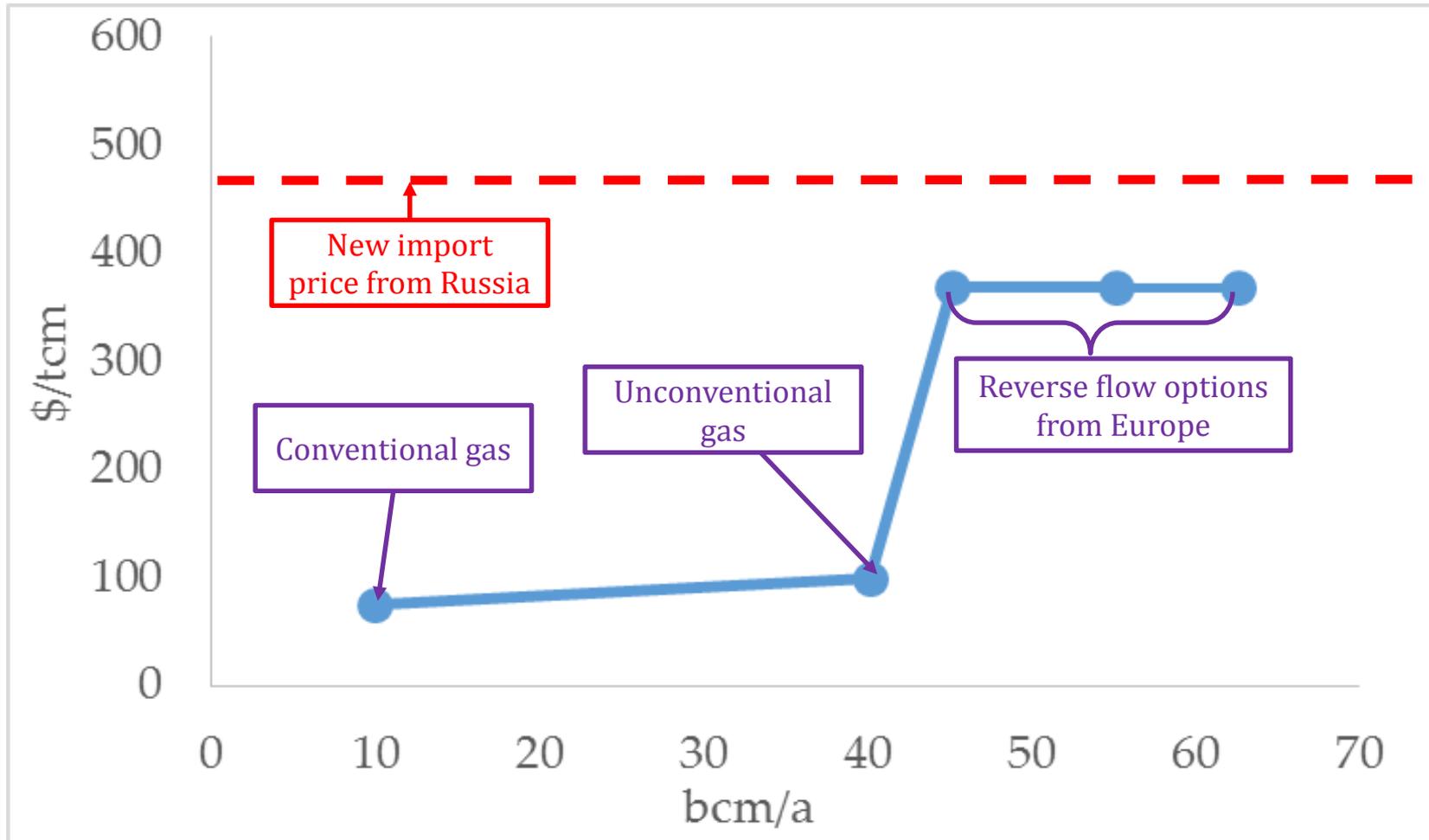
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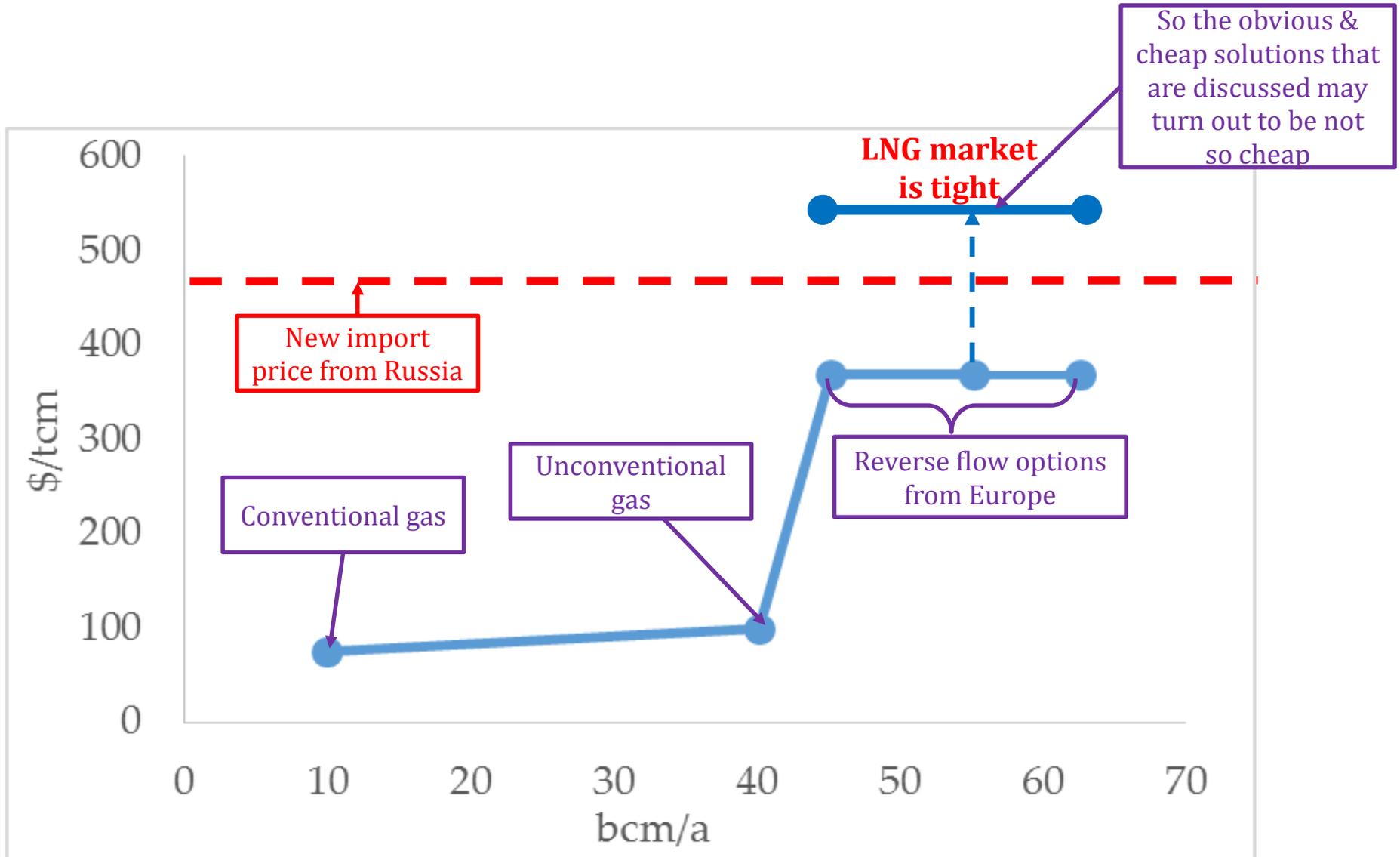
this would depend on international gas markets



Variable costs for non-Russian supply options



Variable costs for non-Russian supply options



Conclusions

- Supply disruption to Europe is unavoidable unless Ukraine and Russia find an agreement very soon or unless Ukraine is able to import more gas in the reverse mode (from Europe)
- The role of Ukraine as a transit country is diminishing with the construction of pipelines that bypass Ukraine
- Gas and cultural politics play central role in Ukraine's foreign and energy policy
- the economics of reverse flow options are rather questionable

Thank you

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