

Стресс-тестирование торговых позиций

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Управление рисков*





Стресс-тестирование торговых позиций

План презентации:

- Исторические сценарии стресс-тестирования
- Примерные практические сценарии стресс-тестирования
- Лимиты на стресс-тест и риск-аппетит



Исторические сценарии стресс-тестирования

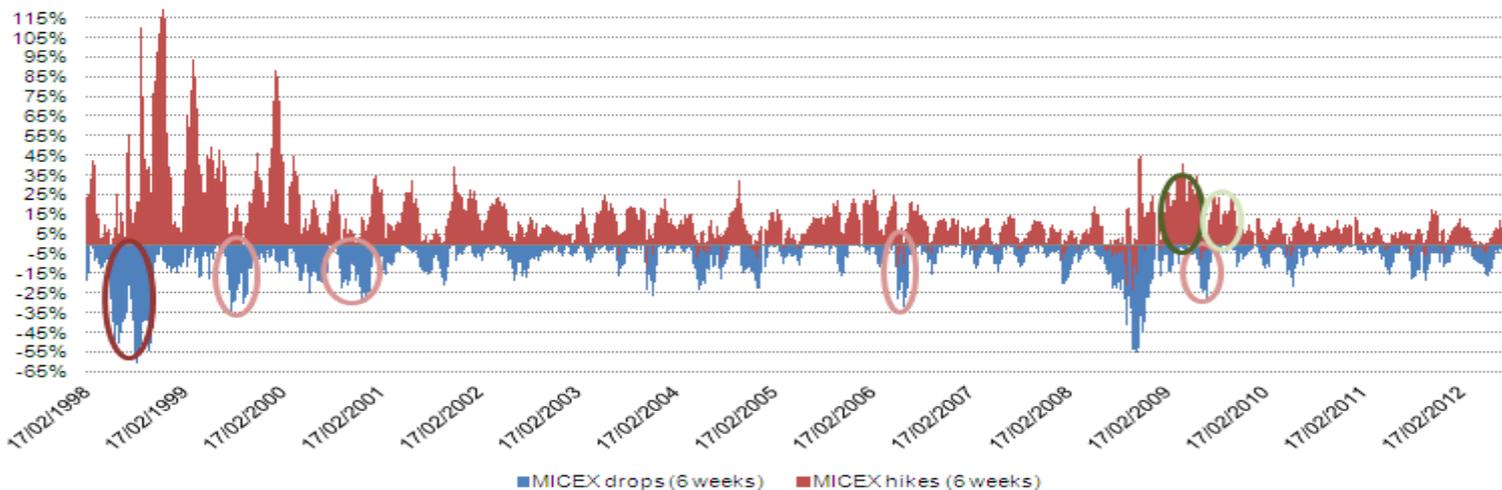
- 1998: Внешний кризис + суверенный дефолт России
- 2008: Кризис ипотечных инструментов + дефолт Lehman Brothers
- 2010:
- 2011: Понижение кредитного рейтинга США
- 2013: Угроза прекращения QE3

Практические сценарии стресс-тестирования

- Масштаб стресс-событий
 - Средний (“moderate”): 2010-2011
 - Высокий (“severe”): 2008
- Направление
- Корреляция



Исторические сценарии стресс-тестирования: Акции

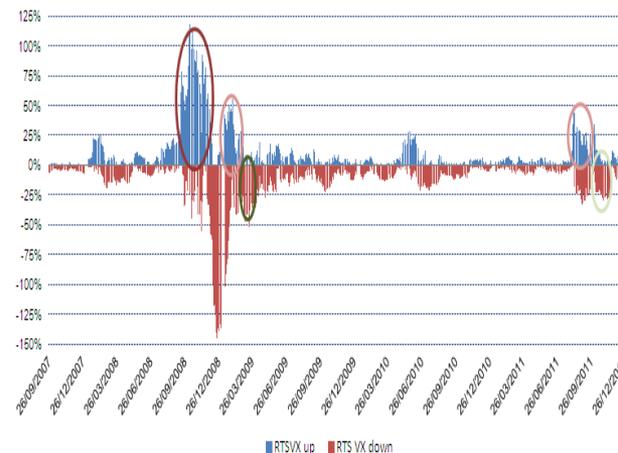


Severe stress (holding period – 6 weeks):

	Downside	Neutral	Upside
EM spot	from -50% to -30%	-	from +25% to +35%
DEV spot	from -30% to +5%	-	from -5% to +20%
EM vol	from +25% to +60%	-	from -10% to -25%
DEV vol	from -5% to +30%	-	from -15% to +5%

Moderate stress (holding period – 6 weeks):

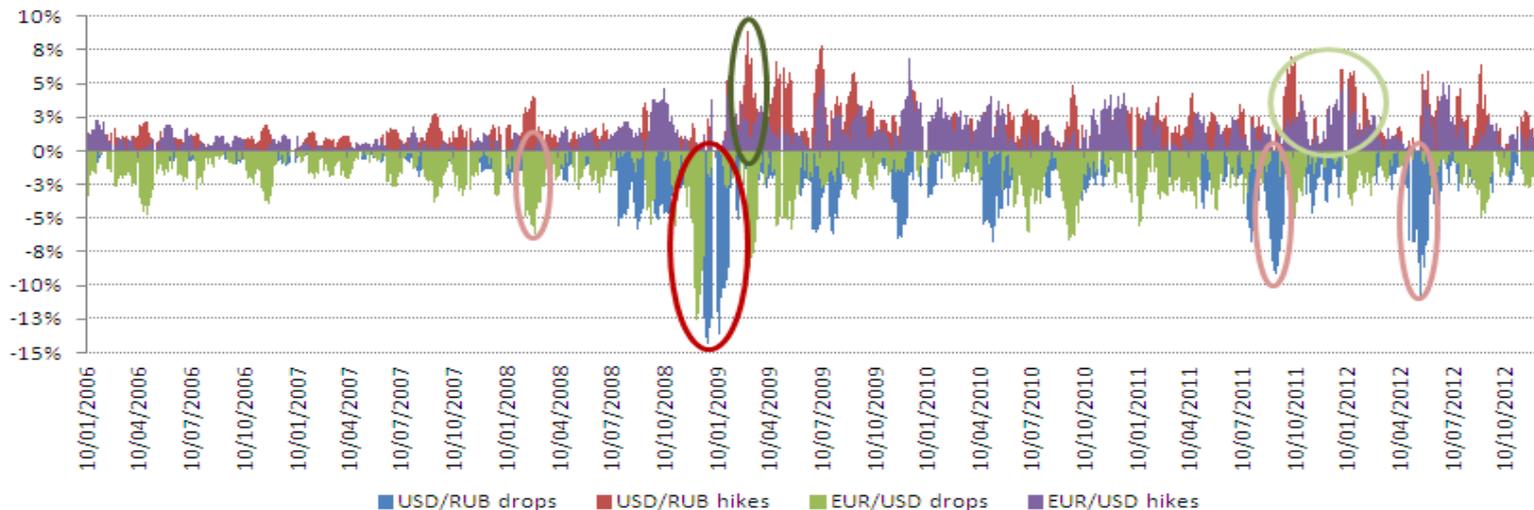
	Downside	Neutral	Upside
EM spot	from -30% to -20%	from -15% to +10%	from +15% to +20%
DEV spot	from -15% to +5%	from -5% to +10%	from -5% to +10%
EM vol	from +15% to +45%	from -5% to +10%	from -10% to -20%
DEV vol	from -5% to +15%	from -10% to +5%	from -10% to +5%



* Изменения за 6 недель



Исторические сценарии стресс-тестирования: Валютные курсы



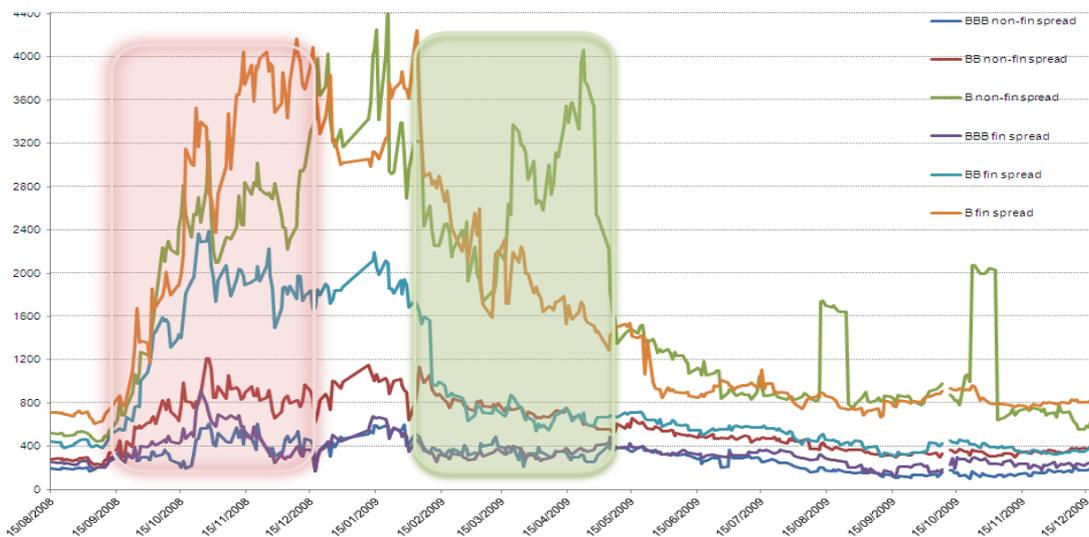
Severe stress (holding period – 3 weeks):

	Downside	Neutral	Upside
FX RUB spot	from -15% to -10%	-	from 8% to +10%
FX RUB vols	from +10% to +25%	-	from -15% to -10%
FX EUR spot	from -13% to -10%	-	from +5% to +8%
FX EUR vols	from +10% to +15%	-	from -15% to -10%
FX CNY spot	from -10% to +1%	-	from -1% to +5%
FX CNY vols	-	-	-

Moderate stress (holding period – 3 weeks):

	Downside	Neutral	Upside
FX RUB spot	from -10% to -8%	from -5% to +5%	from +5% to +8%
FX RUB vols	from +10% to +15%	from -5% to +10%	from -10% to -5%
FX EUR spot	from -8% to -5%	from -4% to +4%	from +3% to +5%
FX EUR vols	from +5% to +10%	from -5% to +5%	from 10% to -5%
FX CNY spot	from -5% to +1%	from -5% to +5%	from -1% to +4%
FX CNY vols	-	-	-

Исторические сценарии стресс-тестирования: Облигации



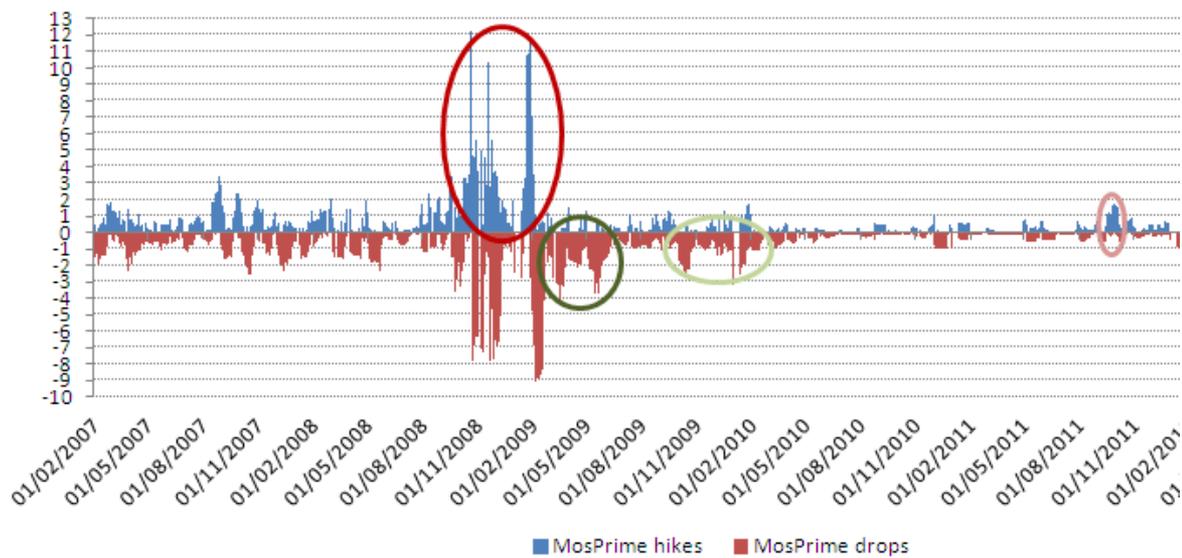
Severe stress (holding period – 12 weeks):

RUB	Downside	Neutral	Upside
BBB-fin spread	from +4.00% to +6.00%	-	from -2% to -1.50%
BB-fin spread	from +15.00% to +18.00%	-	from -3% to -2.00%
B-fin spread	from +23.00% to +30.00%	-	from -4% to -3.00%
BBB-nonfin spread	from +3.00% to +4.00%	-	from -2% to -1.50%
BB-nonfin spread	from +6.00% to +9.00%	-	from -2.5% to -1.50%
B-nonfin spread	from +17.00% to +21.00%	-	from -4% to -3.00%
OFZ base rate	from +2.00% to +4.00%	-	from -2% to +1.00%

Moderate stress (holding period – 12 weeks):

RUB	Downside	Neutral	Upside
BBB-fin spread	from +1.00% to +2.00%	from -1.00% to +1.00%	from -1.50% to -1.00%
BB-fin spread	from +2.00% to +3.00%	from -1.00% to +1.50%	from -2.00% to -1.00%
B-fin spread	from +4.00% to +6.00%	from -1.50% to +2.00%	from -2.50% to -1.50%
BBB-nonfin spread	from +1.00% to +2.00%	from -1.00% to +1.00%	from -1.50% to -1.00%
BB-nonfin spread	from +2.00% to +3.00%	from -1.00% to +1.50%	from -2.00% to -1.00%
B-nonfin spread	from +4.00% to +6.00%	from -1.50% to +2.00%	from -2.50% to -1.50%
OFZ base rate	from +1.00% to +2.00%	from -1.00% to +1.00%	from -1.00% to +1.00%

Исторические сценарии стресс-тестирования: Процентные ставки



Severe stress (holding period – 3 weeks):

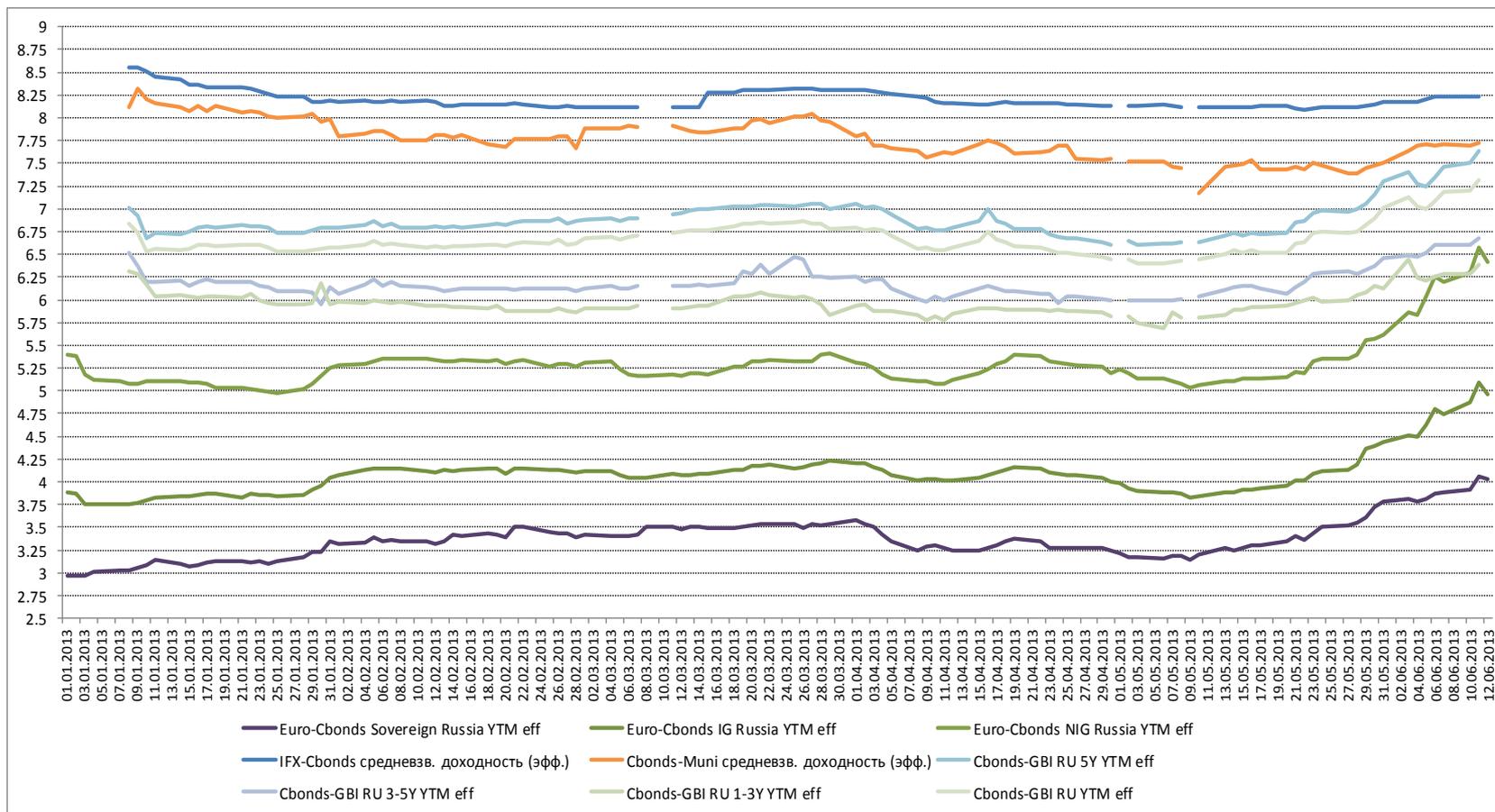
	Downside	Neutral	Upside
IR RUB	from +8% to +10%	-	from -2% to +1%
IR USD	from -2% to +0.25%	-	from 0% to +2%
IR EUR	from -2% to +1%	-	from 0% to +3%
IR CNY	from +2% to +5%	-	from -2% to +3%

Moderate stress (holding period – 3 weeks):

	Downside	Neutral	Upside
IR RUB	from +2% to +3%	from -1% to +2%	from -1% to +1%
IR USD	from -1% to +0.25%	from 0% to +1%	from 0% to +1%
IR EUR	from -1% to +1%	from 0% to +2%	from 0% to +2%
IR CNY	from +1% to +3%	from -1% to +2%	from -1% to +2%

Пример для размышления: Облигации в 2013 году

Yield Indices - Local Bonds (MICEX CBI, OFZ) vs Eurobonds (Euro-Cbonds)





Лимиты на стресс-тест и риск-аппетит

- Выбор сценариев
- Динамическое применение сценариев в зависимости от рыночной ситуации и риск-аппетита
- Определение лимитов на стресс-тест:
 - Функции показателей Организации:
 - Доля от прибыли
 - Доля от капитала
 - Доля от оборота
 - Прочее
 - Внешние ограничения:
 - Регуляторный капитал
 - Нормативы



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