

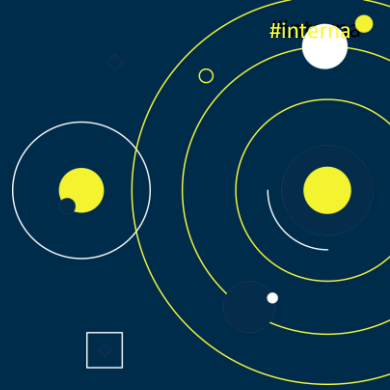


# Modelos Analíticos

---

UNI  
Dezembro 2022





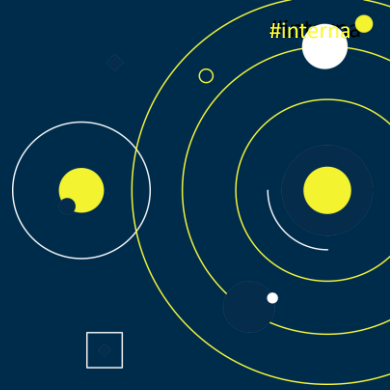
## Objetivo

- **Projetar o possível volume de câmbio do BB em cenários previstos pela BB/Assessoramento Econômico**

## Áreas envolvidas

- **Business Intelligence (UNI)**
- **BB/Assessoramento Econômico**

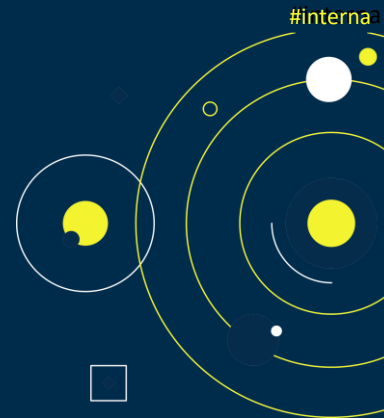




## Metodologia

- ARIMA, com sazonalidade e variáveis exógenas como modelo de regressão
- Correlação de Pearson





## Teste de variáveis

### Correlação de Pearson

Muito forte

Forte

Fraca

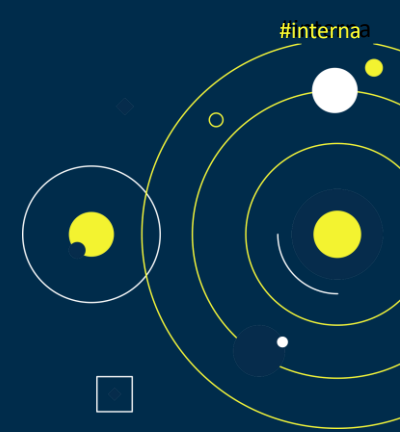
Forte

Muito forte



valor_usd	1	0.11	-0.71	-0.37	-0.021	0.15	0.066	-0.16	-0.16	-0.33
valor_ipca	0.11	1	0.22	0.21	0.5	0.4	0.32	0.37	0.56	0.21
valor_selic	-0.71	0.22	1	0.43	-0.056	-0.31	-0.38	-0.13	0.23	-0.026
valor_fed	-0.37	0.21	0.43	1	0.41	0.29	0.079	0.04	0.26	0.18
indice_imp	-0.021	0.5	-0.056	0.41	1	0.9	0.81	0.69	0.53	0.44
indice_exp	0.15	0.4	-0.31	0.29	0.9	1	0.8	0.7	0.47	0.43
quantum_imp	0.066	0.32	-0.38	0.079	0.81	0.8	1	0.79	0.4	0.51
quant_import	-0.16	0.37	-0.13	0.04	0.69	0.7	0.79	1	0.57	0.67
quant_export	-0.16	0.56	0.23	0.26	0.53	0.47	0.4	0.57	1	0.59
indice_atividade	-0.33	0.21	-0.026	0.18	0.44	0.43	0.51	0.67	0.59	1
	valor_usd	valor_ipca	valor_selic	valor_fed	indice_imp	indice_exp	quantum_imp	quant_import	quant_export	indice_atividade





## Coleta de Dados

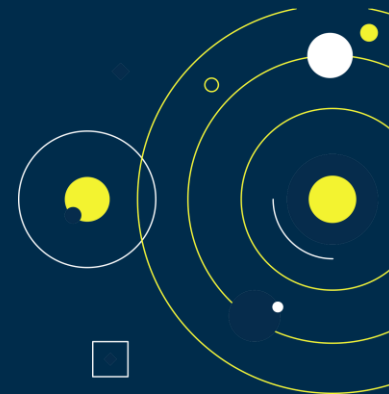
- Período de estudo Jan/2014 – Out/2022

## Variáveis escolhidas

- IPCA Mensal e Ac. 12 meses;
- Selic Mensal e Ac. 12 meses;
- Taxa cambial (US\$) mensal;
- Taxa Fed. mensal.

var	usd	ipca_acumu	ipca_mensal	selic_acumu	selic_mes	valor_fed	volume_exp	volume_imp
usd	1	0.11	0.069	-0.69	-0.53	0.032	-0.48	-0.33
ipca_acumu	0.11	1	0.47	0.22	0.59	-0.39	0.16	0.28
ipca_mensal	0.069	0.47	1	-0.12	0.03	-0.43	0.0075	0.11
selic_acumu	-0.69	0.22	-0.12	1	0.87	-0.043	0.28	-0.0085
selic_mes	-0.53	0.59	0.03	0.87	1	-0.11	0.4	0.26
valor_fed	0.032	-0.39	-0.43	-0.043	-0.11	1	0.0023	-0.067
volume_exp	-0.48	0.16	0.0075	0.28	0.4	0.0023	1	0.68
volume_imp	-0.33	0.28	0.11	-0.0085	0.26	-0.067	0.68	1

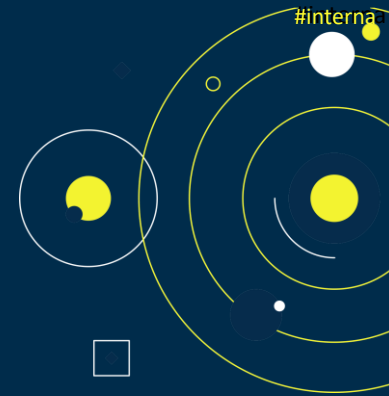




## Análise dos cenários previstos para Dez/2022

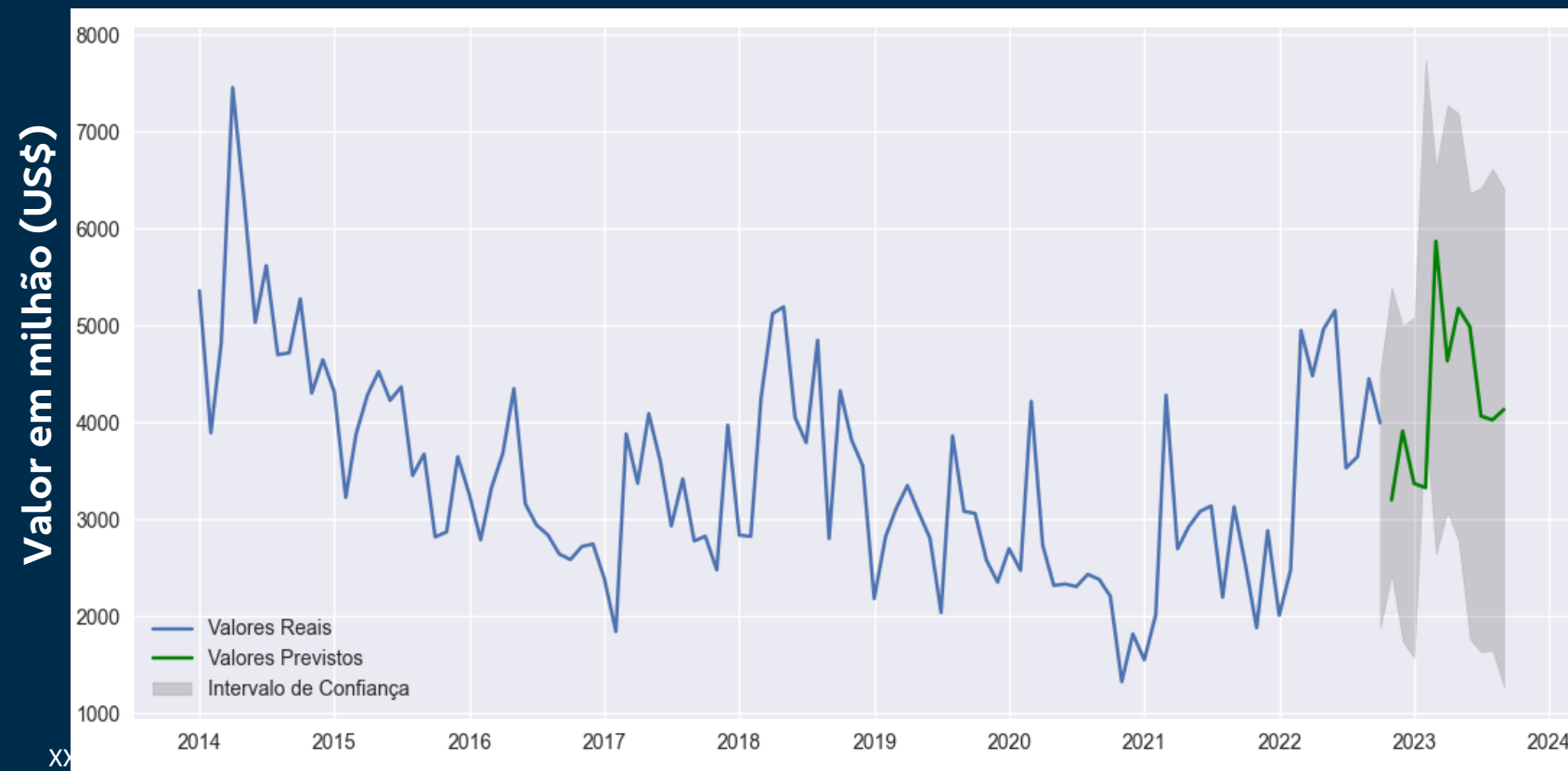
	IPCA	SELIC	TX. CÂMBIO	FED
Base	0,72%	12,38%	5,20 R\$/US\$	4,50%
Otimista	0,57%	13,75%	4,30 R\$/US\$	4,25%
Pessimista	0,81%	13,95%	6,20 R\$/US\$	5,25%





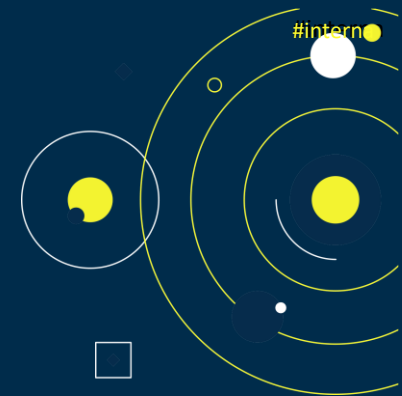
## Cenário Base

- **Previsão volume contratado no mercado de Exportações de 12 meses em dólar (US\$)**



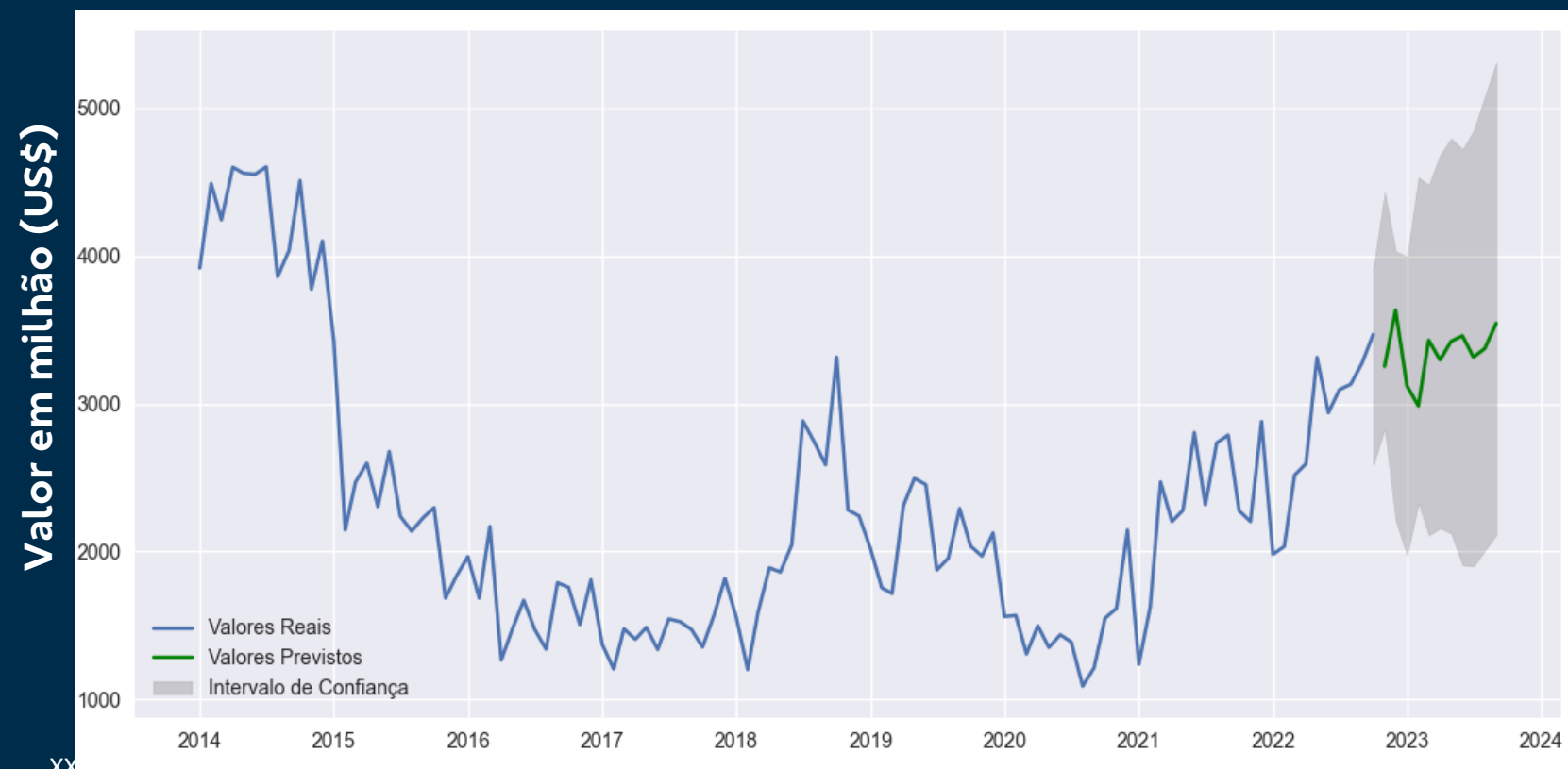
- **Out/2022-Dez/2022**
- **-1,9% ↓**
- **3,913 Bi (US\$)**





## Cenário Base

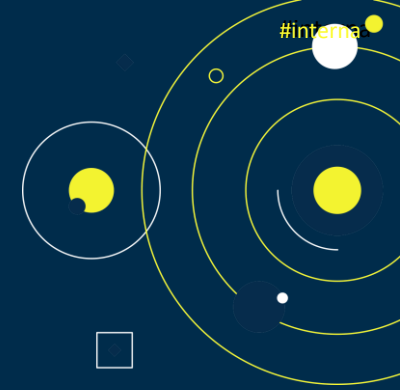
- **Previsão volume contratado no mercado de Importações de 12 meses em dólar (US\$)**



- **Out/2022-Dez/2022**
- **+4,7%** ↑
- **3,631 Bi (US\$)**

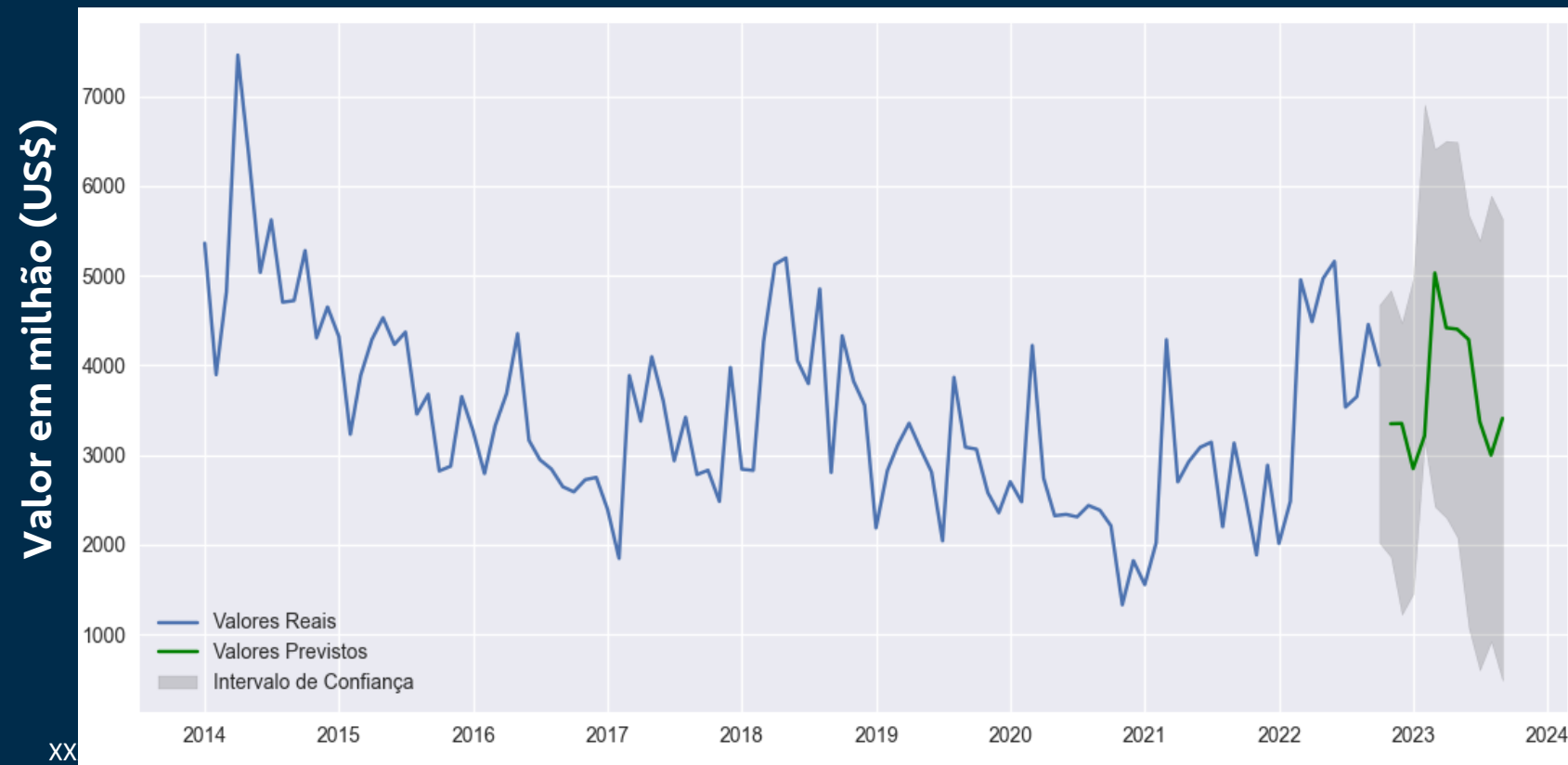






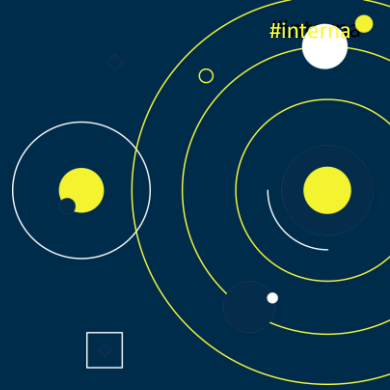
## Cenário Otimista

- **Previsão volume contratado no mercado de Exportações de 12 meses em dólar (US\$)**



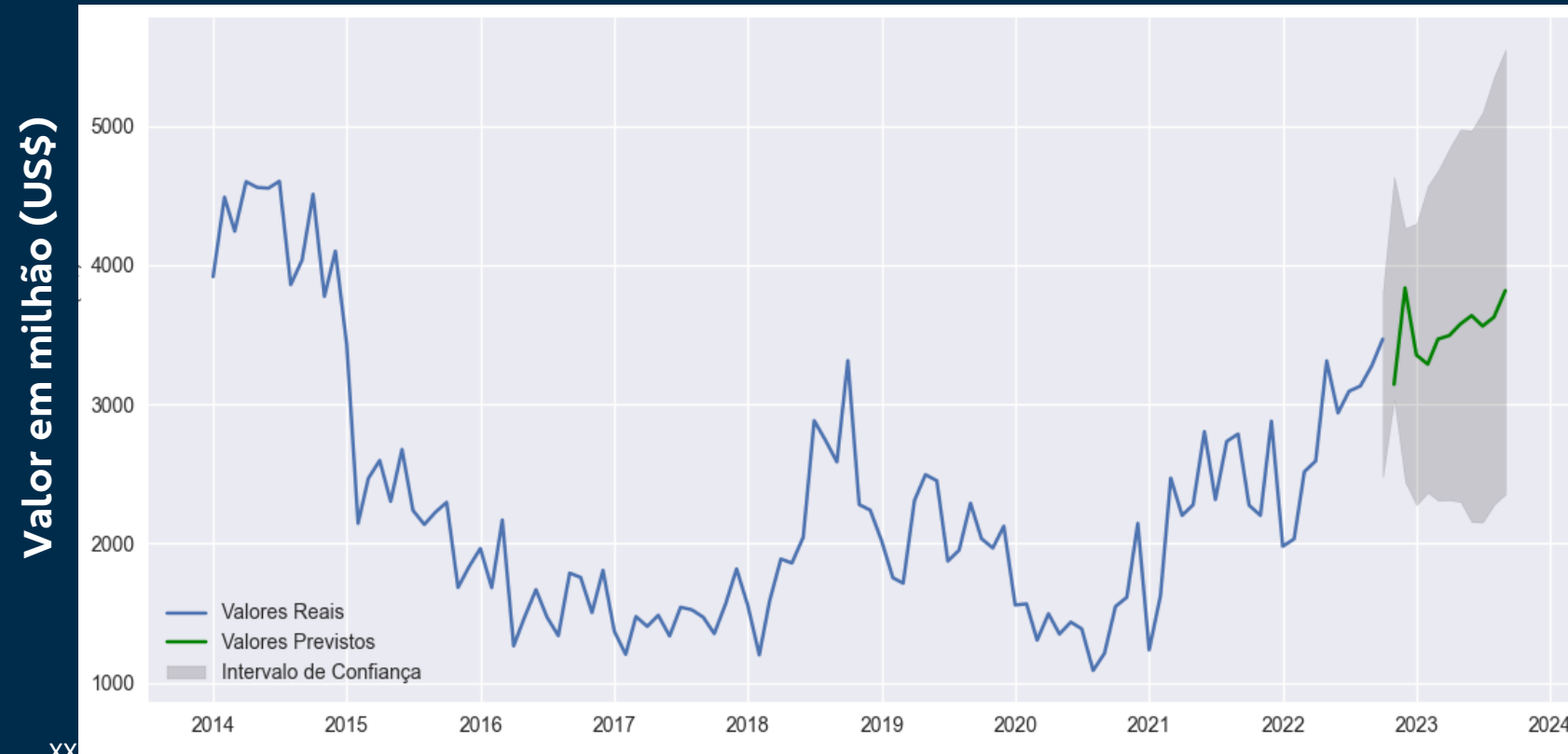
- **Out/2022-Dez/2022**
- **-16%** ↓
- **3,350 Bi (US\$)**





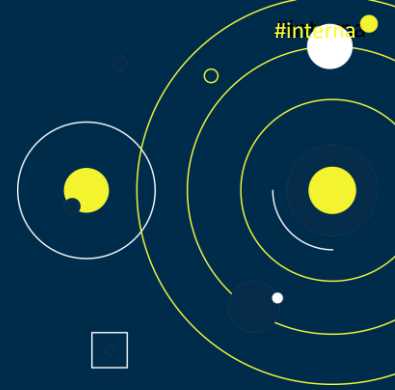
## Cenário Otimista

- Previsão volume contratado no mercado de Importações de 12 meses em dólar (US\$)



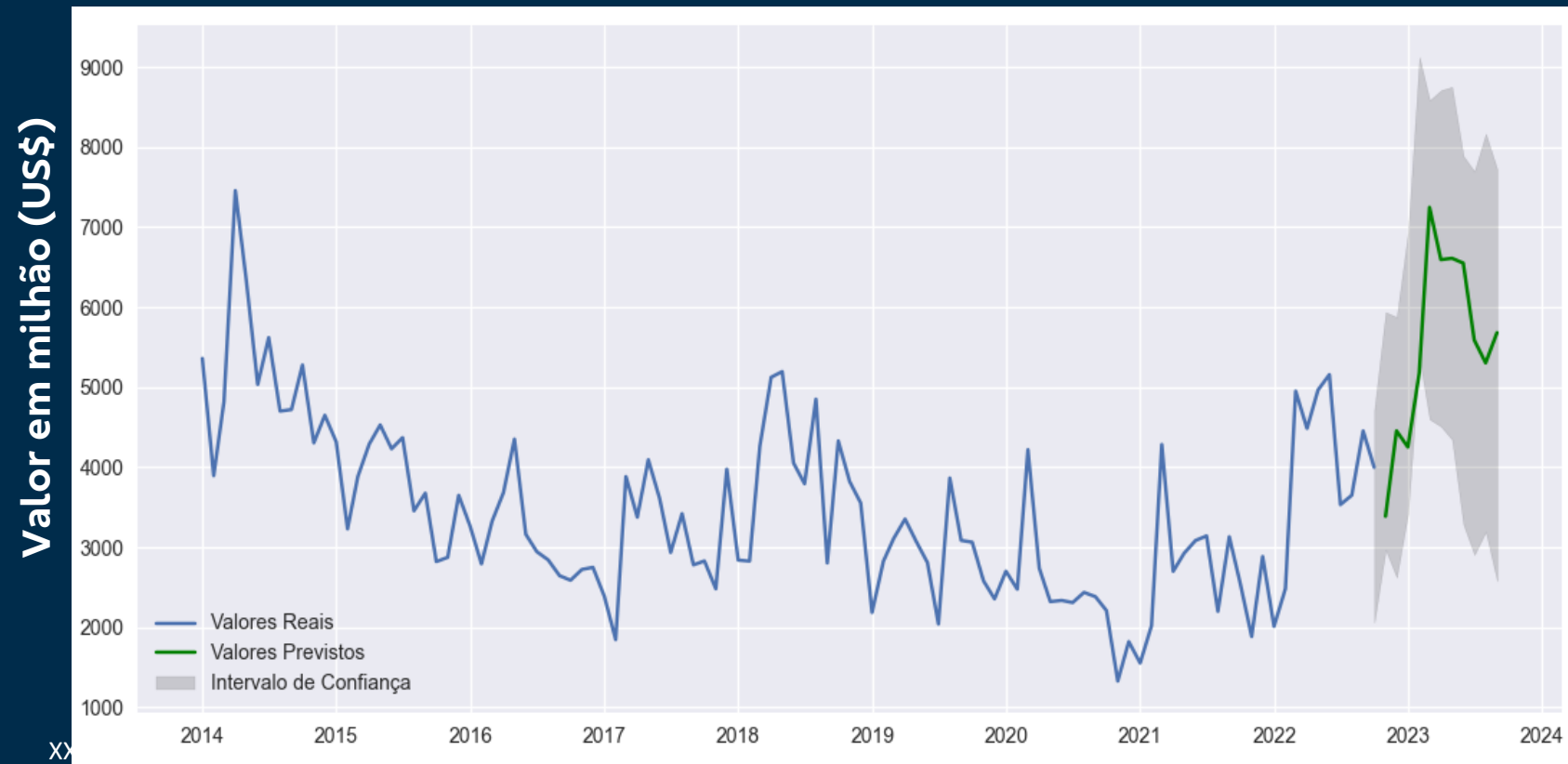
- Out/2022-Dez/2022
- +10,5% ↑
- 3,835 Bi (US\$)





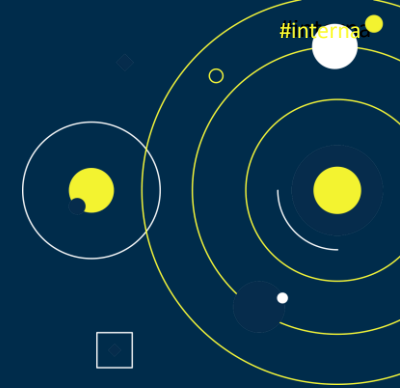
## Cenário Pessimista

- **Previsão volume contratado no mercado de Exportações de 12 meses em dólar (US\$)**



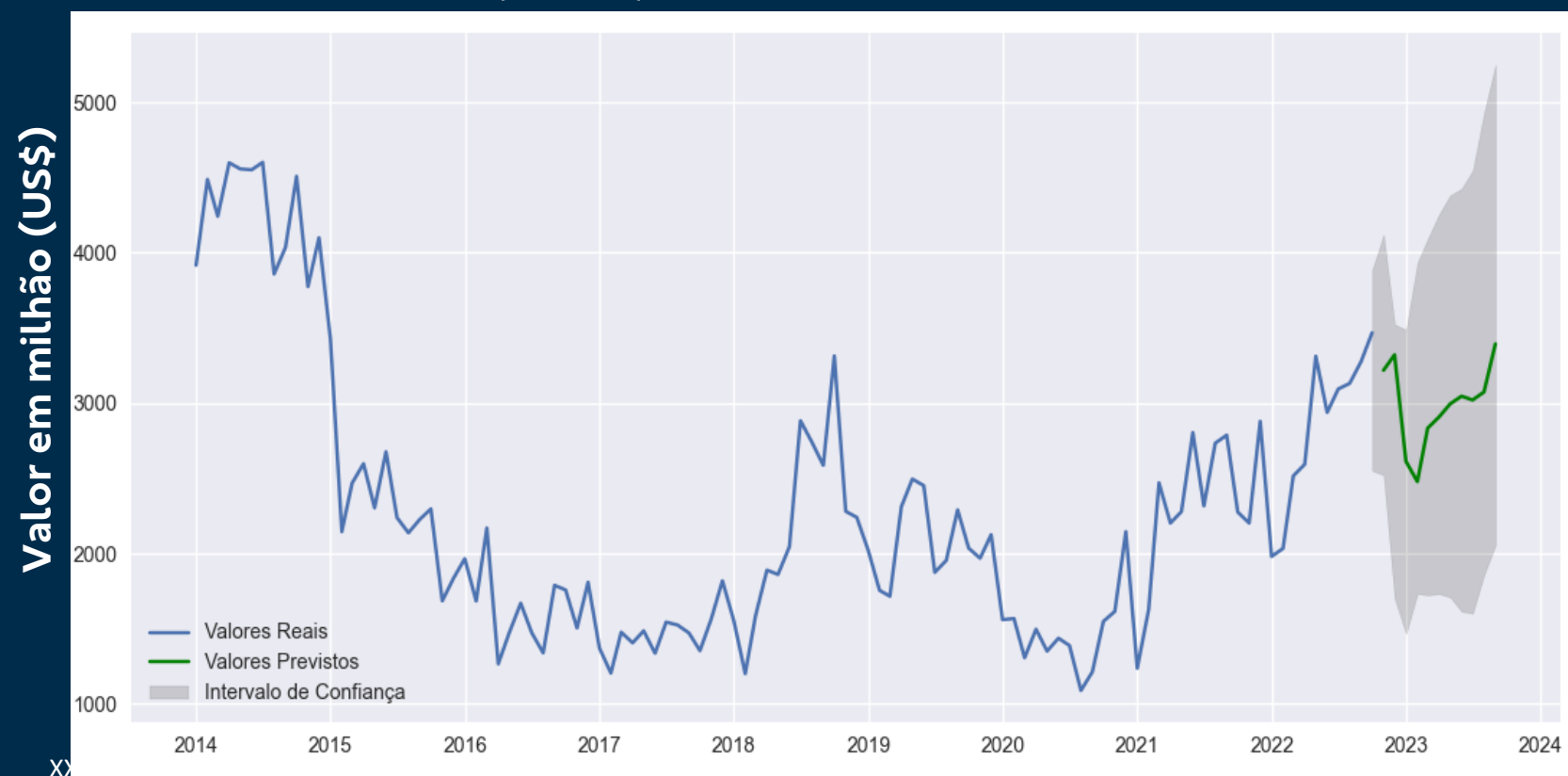
- **Out/2022-Dez/2022**
- **+11,6%** ↑
- **4,455 Bi (US\$)**



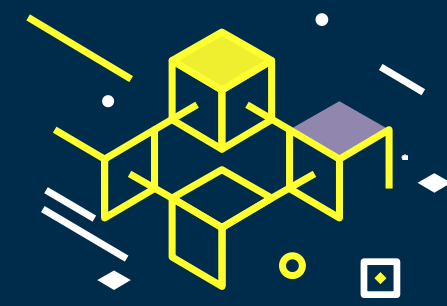


## Cenário Pessimista

- **Previsão volume contratado no mercado de Importações de 12 meses em dólar (US\$)**



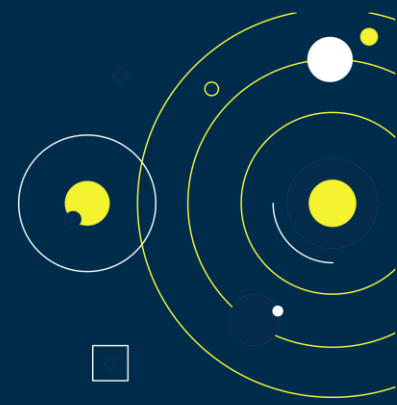
- **Out/2022-Dez/2022**
- **-4,2% ↓**
- **3,321 Bi (US\$)**

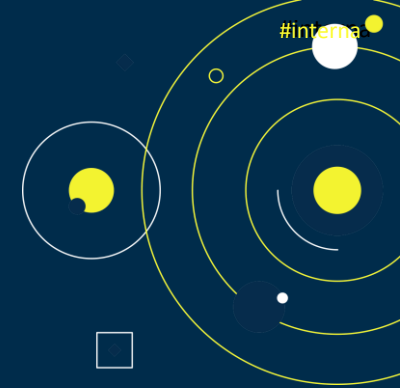




## Visualização Geral

	Exportações	Importações
Base	3,913 Bi (-1,9%) ↓	3,631 Bi (+4,7%) ↑
Otimista	3,350 Bi (-16%) ↓	3,835 Bi (+10,5%) ↑
Pessimista	4,455 Bi (+11,6%) ↑	3,321 Bi (-4,2%) ↓





## Considerações Finais

Com o modelo escolhido e cenários projetados pelo BB, temos que as variáveis com correlações fortes ao volume de importação e exportação afetarão significativamente o valor previsto





OBRIGADO

*Business  
Intelligence*

