

Checking in practice the behavior of the **ReservedUSD** (<http://terawallet.org/dapp/113>) smart contract when the USD/TERA exchange rate changes.

Our initial deposit is 2,000 TERA

We will send 1000 TERA, in return we will get 1000 DAO

	TERA	USD	DAO
Deposit	1 000	0	1 000
Pool	250	1	

If we change the DAO right now, for example, 1000, then we will get the same amount of TERA back, i.e. 1000

Select mode:

Send to TERA/USD pools ▼

Specify the amount:

Send	1 000 TERA
Receive	1 000 DAO
Price 1 TERA	0,003 USD
Price 1 DAO	1 TERA

Let's conduct exchange operations so that the TERA/USD exchange rate changes. Before the exchange, the instant current rate was 0.003 USD per TERA

Price 1 DAO	1 TERA
Price 1 TERA	0.003 USD
Swap Fee	0.2 %
Reserve Rate	0.001
Volume Tera swap	0
Volume USD swap	0

Change the 500 TERA

Select swap mode:

Tera → USD

Specify the amount: 500 all

Send	500 TERA
Receive	0,499666 USD
Price 1 TERA	0,000999 USD

SWAP

After the exchange, the instant current rate became 0.000333 USD per TERA:

Price 1 DAO	1.000333 TERA
Price 1 TERA	0.000333 USD
Swap Fee	0.2 %
Reserve Rate	0.001
Volume Tera swap	500
Volume USD swap	0

That is, it has approximately decreased by 10 times.

Let's try to change DAO to TERA:

You can change all 1000 DAOs, in return returning 1000.1 TERA - i.e. all the initial investment + interest for exchange operations that are accrued on DAP tokens-these are our dividends.

Select mode:

Remove liquidity (get TERA)

Specify the amount: 1000 all

Send	1 000 DAO
Receive	1 000,104665 TERA
Price 1 DAO	1,000105 TERA

Remove

Conclusions:

Thus, we can conclude that when the exchange rate changes in a smaller direction (i.e., the cost of TERA), all investments are guaranteed to return.

