



Vidya Vikas Education Trust's
Universal College of Engineering
Kaman - Bhiwandi Road, Vasai, Maharashtra
Accredited with 'B+' grade by NAAC, approved by AICTE, DTE
Recognised as Gujrati Linguistic Minority

CURRENT WAVES

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College Profile

Everything you need to know about us.

Embraced by lush greenery and scenic beauty, Universal College of Engineering is a treasured place for aspiring engineers to leave their imprints towards success.

As a college within the wider network frame, we are one of the fastest growing institutions in India. Our institute has been accredited by National Assessment and Accreditation Council (NAAC) with **B+ grade** in the first cycle of accreditation. Times of India Survey **Ranked No. 1** in India among Top Emerging Private Engineering Institutes for 5 consecutive years 2015, 2016, 2017, 2018 and 2019 and the saga of accolades still continues.

In response to the expectations of quality technical education, our college is approved by the All India Council for Technical Education (AICTE), New Delhi; recognized by the Directorate of Technical Education (DTE), Government of Maharashtra; affiliated to Mumbai University.

Our college is also associated with professional bodies like IEEE, IETE, ISA and CSI to update the revolutionary technological advancements.

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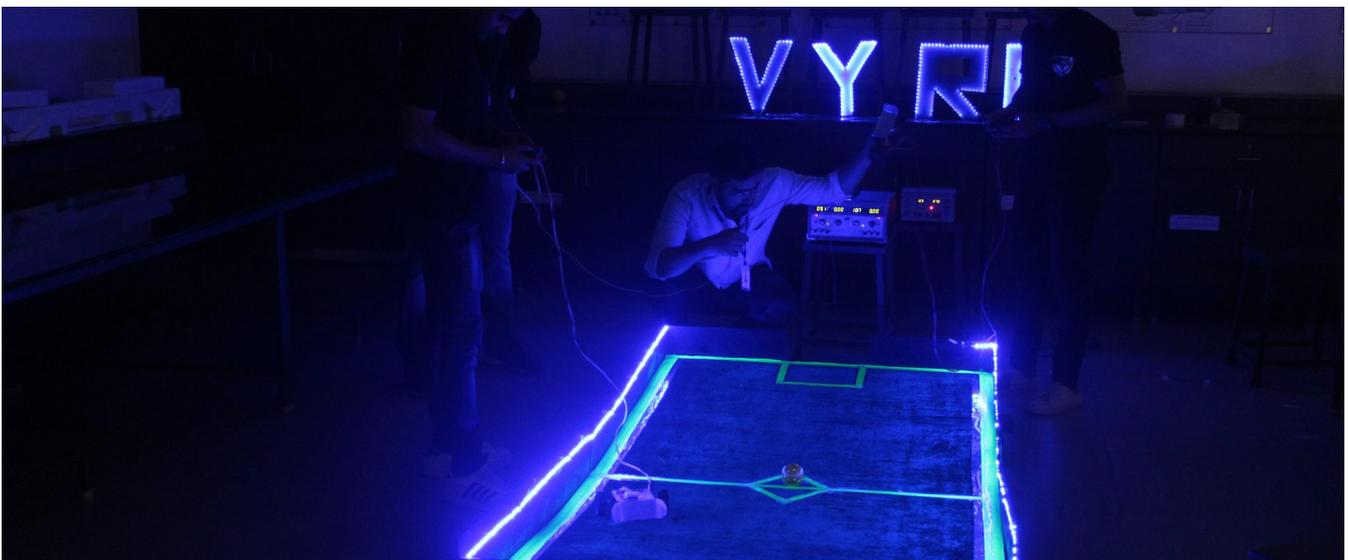
We offer 4 years full-time Bachelor of Technology in Computer Engineering, Civil Engineering, Artificial Intelligence & Machine Learning, Information Technology Engineering and Data Engineering.

The unique state-of-the-art facility of the institute has been carefully designed to accommodate the needs of the students. Laboratories are equipped with world-class facilities based on the latest technology of different sectors. Our smart classrooms are well ventilated, spacious and equipped with overhead and LCD projectors along with the public address system. College library provides a rich collection of specialist library resources and services to support students' academic work and enrich their research skills.



We are obliged to equip our students to get placed in highly reputed companies by mentoring their necessary skill set for cutting-edge technologies. The core highlighted areas are helping students with their technical competency, communication skills along with career guidance and counselling.

Universal College of Engineering has produced a large number of successful alumni who are working in reputed organisations in India and abroad and have contributed immensely to the cause of nation-building and society. We welcome all engineering aspirants to create an incredible legacy in the field of engineering.



The Stamp Duty story

A few days ago, Maharashtra reported that it had seen a spurt in revenue collection after having reduced stamp duty on sale deeds. So we thought we could take a closer look at this story and perhaps explain how stamp duty has been evolving over the years.



Policy

The Story

Think of stamp duty as a tax the government imposes on certain kinds of documents related to certain transactions. For instance, when you transfer property. And while it can be a bit annoying, it also has a certain elegance to it. Think about it. The government can raise a lot of money by expending very little resources, and they can do it without burdening any particular class of individuals. You've probably paid stamp duty while you bought your favorite stock a couple of days ago. Your mum probably paid for it when she sold that nice property a few months back.

And most people have probably paid some sort of stamp duty whilst dabbling with government records. In effect, people from all walks of life pay this charge.

But more importantly, it's determined "ad valorem," in most cases. It's a fancy way of saying—"The duty is paid in proportion to the total transactional value." For instance, a 5% duty on a land parcel valued at 1 Cr is obviously more taxing than a 5% duty on a property worth 10 lakhs. So if you're an individual of modest means, you won't be impacted as much—although many people would like to disagree with this assessment. And as such, there has been a lot of clamor from both the public and the central government to reduce stamp duties for a while now.

In fact, only a couple of decades ago, stamp duties on property transfers were as high as 14% in some states. People were obviously upset. But the central government joining this movement in solidarity doesn't make any sense. At least not immediately. Until you realise that stamp duties are collected by the state government. In fact, in most states, stamps and other registration charges bring in so much money that they are the third or the fourth biggest revenue contributors. However, if you have a disproportionately high charge, people will find sneaky ways to evade it. Or in other cases, underreport the value of the transaction. And while this obviously affects the state's revenue, it also does something else.

When people underreport the final sale price, they are also effectively saying —“We aren't making a lot of money from the transaction.” And when the central government taxes the gains made on the sale, they'll be raking in less money. So the Centre has a lot to lose here as well. Also, when the union government pursues an agenda to house everyone, these high stamp duties can be a bit of a problem. And as a result, the central government has been incentivizing states to reduce stamp duties and it's been on a steady decline since 2003–04, at least for the most part. This sets the context adequately and we can begin addressing the actual headline. So a few months back, the state government in Maharashtra decided to reduce stamp duty once again by 3%—for the period between September and December. This put the effective stamp duty rate at 3% in urban areas and 2% in rural areas. The hope was that this would spur demand for houses in Maharashtra. And guess what?

It seems to have done exactly that.

According to a statement from the Revenue Minister, registration of documents rose by about 4 lakhs and brought in extra revenues of Rs 367 crores, compared to the same period last year. And while you might be inclined to think this is an obvious outcome, do bear in mind —“Lower taxes don't automatically increase tax revenue.” Yes, people are less likely to underreport the final sale price. And sure, they might also transact in a transparent manner. But that doesn't mean it will always benefit the state. In effect, lower taxes in some cases could increase revenue; but figuring out the exact details of those circumstances requires a lot of research.

And while it has worked out for the government quite nicely this time around, it doesn't mean it will always benefit them. But hey, low stamp duties are always nice to have. So I am pretty sure, nobody is complaining here.

The Incentive Problem with MDR

Banks want MDR (merchant discount rate) reinstated for RuPay and UPI transactions. The only problem—Most people still don't fully understand the issue. So in this newsletter, we discuss MDR, its abolition, and more.



Business

The story

Think of MDR as a charge on the total transaction value when you buy something using a credit/debit card. It usually tallies up to 1-3% and it is perhaps best illustrated using an example. Let's suppose you buy a box of chocolates for ₹100. You don't have cash on you. So you decide to pay using your SBI debit card. This sets off an elaborate tango that involves multiple stakeholders. The moment you swipe your card, the store owner's bank will receive the transaction information associated with your purchase. The bank will now have to verify with SBI if you've got enough money to pay for the purchase. And they'll also have to see if all your information checks out.

However, they can't do it on their own. Instead, they'll have to rely on a payment network operated by Visa, Mastercard or RuPay. Once these guys enter the fray, they'll relay the information to SBI and after everything checks out, the money will finally be credited to the store owner's account. That is after everyone has taken their cut. Your bank will take a small piece of the pie. The merchant's bank will take its cut and the likes of Visa and Mastercard will take their share. And the store owner will only receive what's left. In essence, if the MDR stood at 1%, he will receive ₹99 from your purchase.

But here's the problem. For a government that is trying to push the digital payments initiative, this is a bottleneck. Remember, if the merchant is facilitating a digital transaction, he loses the ₹1 and he will be more inclined to simply accept payment in cash. So in a bid to encourage people to adopt digital payments the Finance Ministry simply decided to waive MDR on all transactions made through UPI and RuPay debit cards in 2019.

And while you could argue that this did, in fact, promote digital payments, it also did something else. Remember, the banks still have to process digital transactions. They still have to do the tango. The only difference—They have to bear the cost themselves. So they did the only thing they could. They lobbied. The Indian Banks' Association (IBA) sought compensation to the tune of ₹2000 crore a year, to run the RuPay/UPI infrastructure. They wanted to make up for the lost revenue through MDR. The finance ministry however politely declined. Their contention was simple.

They believed the promotion of digital transactions would allow banks to save money elsewhere. For instance, the ministry estimated that banks could save up to ₹21,000 crores from not having to handle and process cash. They asserted that this money could easily help banks operate the digital ecosystem supporting UPI. But soon enough, cracks began to appear.

The banks lobbied once again. This time they wanted a waiver. A waiver of the PSP fee. Now bear in mind we haven't yet discussed third party app providers. These are intermediaries in the digital ecosystem that also help facilitate UPI and RuPay transactions.

Think Google Pay. And while most of them are loss-making as it stands, they did levy a small charge on banks (called the PSP fee) for helping them process digital transactions. But since banks were already cracking under the pressure, they wanted the PSP fee waived off as well. And once that happened, more players in the digital ecosystem had to suffer.

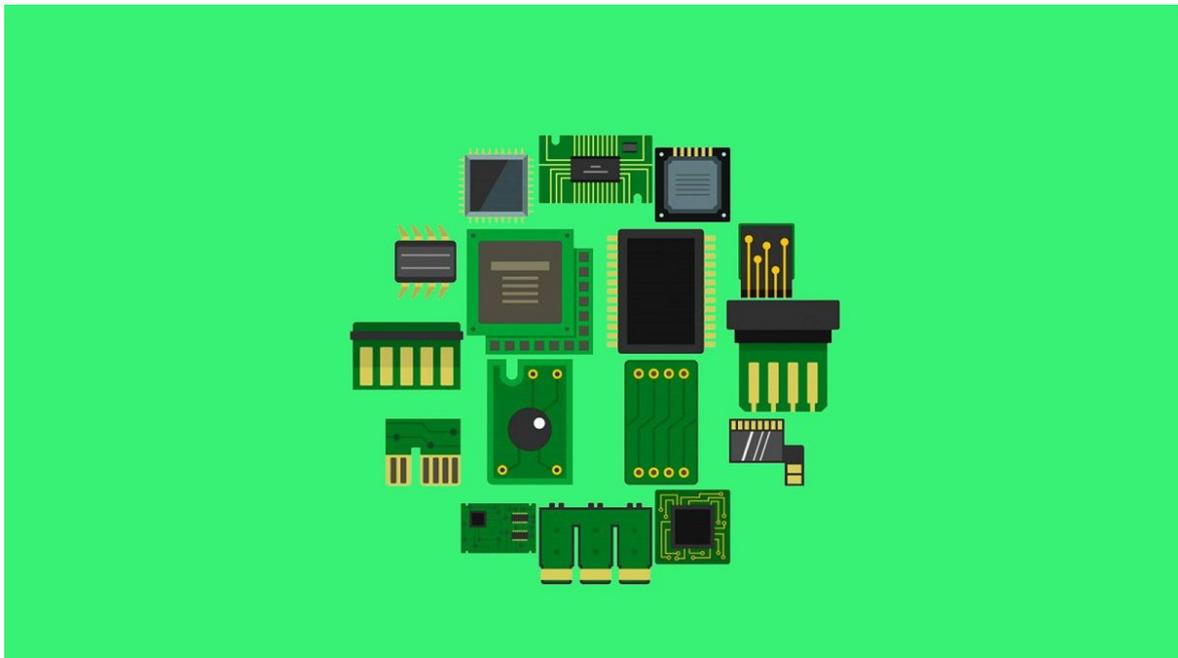
Meanwhile, banks were also becoming increasingly reluctant to issue new RuPay cards. After all, processing a RuPay card transaction had no upside. They simply had no incentive. So they went slow and pushed it on the backburner. Customers also reported frequent failures with these indigenous cards and the banks now contest that this problem will likely persist unless MDR charges are reinstated.

And that's why the IBA and payment forums recently approached the government to reverse its stand on MDR. As reported in an Economic Times article — *"While the aim was to promote digital payments, the financial inclusion agenda has taken a severe beating; as part of the budget consultation process, a representation has been made to the finance ministry to bring back MDR on RuPay cards"* — **An industry executive.**

So we will just have to wait and see what happens.

The Great Semiconductor Shortage

Car companies are halting production because their vendors can't supply electronic components. Laptops are struggling to meet demand because they don't have computer chips. Mobile phone companies are having to pay through the roof to source critical parts. And it's all happening because the world is witnessing an unprecedented semiconductor shortage.



Policy

The story

Companies dabbling with semiconductors are in a highly specialized business. They are few and far between and they spend billions of dollars planning for the future. Intel spent close to \$8.5 billion in building a fabricator that could produce its flagship E5 chips. These were sophisticated enterprise-level chips and they weren't easy to produce. The research and development cost \$11.5 billion. Mistakes cost extra. And this doesn't include time commitments. Companies have to plan years in advance to build this kind of capacity and scaling production can be quite a challenging task. So you can't wake up one day and suddenly ramp up supply. It's almost next to impossible to achieve this kind of scale.

And the likes of Taiwan Semiconductor Manufacturing Company (TSMC)—the largest semiconductor company in the world haven't been investing aggressively over the past few years. As one article notes—"From 2015 to 2019, the capital investment cycle remained conservative across the industry." It further goes on to add—"Taking a closer look at the semiconductor capital investment trends during the past few years, it becomes clear that under-investment is the root cause of demand-supply imbalance, particularly in logic (non-memory) semiconductor industry."

And that's the crux of the problem. We didn't think we'd need this many semiconductors.

Especially the kind we use for computing stuff. The kind that goes on cars, gaming consoles, mobile phones, and laptops. And it's now pushing us to the brink. However, semiconductor companies should have jumped into action last year when it became evident that the supply lines were being stretched thin. They knew it was inevitable. And truth be told, they would have done it if it weren't for Covid.

However, the current predicament isn't a result of the supply crunch alone.

Companies like Huawei, for instance, have been building semiconductor reserves over the past few years. And the pandemic forced people to spend on sophisticated consumer appliances that further dented supply lines. As an article in Bloomberg notes—"Industry executives also blame excessive stockpiling, which began over the summer when Huawei Technologies Co.—a major smartphone and networking gear maker—began hoarding components to ensure its survival from crippling U.S. sanctions. Led by Huawei, Chinese imports of chips of all kinds climbed to almost \$380 billion in 2020... Rivals including Apple, worried about their own caches, responded in kind. At the same time, the stay-at-home era spurred sales of home appliances from the costliest TVs to the lowliest air purifiers, all of which now come with smart, customized chips."

Also, the impact of this shortage isn't uniform across the board. The likes of Apple can negotiate better than small-time vendors. Meaning, if you are in an industry that sources a lot of semiconductors then you have better bargaining power, plain and simple. Auto manufacturers, unfortunately, rely on third-party vendors who don't source a lot of semiconductors. At least not on a relative scale. So they've been affected real bad.

Bottom Line — The semiconductor shortage is pulling multiple industries to its knees and now you know why.



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